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Abstract

Speakers and discussions at this one day conference were dedicated to building for quality education, with major emphasis on the concept of educational parks. The five major speeches are--(1) Advantages and Disadvantages of Educational Parks, (2) Educational Parks: Appalachian Style, emphasizing a twist in the park idea in order to accommodate rural educational problems, (3) A Haven Against Disaster, treating the problem of communication between administration, teachers, and students, (4) Educational Parks in New York City, a discussion of the park concept as it affected New York City with general comments on the importance of local background in working out details of parking planning, and (5) Total Community Planning, discussing the relationship between the school plant, the teacher, and the process of change in educational programs. In general, the conference served--(1) to identify the range of dimensions to educational facility planning, which vary with different school systems and populations, and (2) to emphasize that with the development of the educational park the approach to quality education has changed and is constantly incorporating new ideas. Panel discussions are included.

(KK)

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**BUILDING FOR
QUALITY EDUCATION—
THE EDUCATIONAL PARK CONCEPT**

Sponsored by:

Office of Construction Service, USOE

and

Interstate School Building Service

Conference Coordinator: W. D. McClurkin

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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**Division of Surveys and Field Services
George Peabody College for Teachers
Nashville, Tennessee 37203**

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MORNING SESSION

August 21, 1967

Presiding: Mr. George Bailey, President, Interstate School Building Service, State Department of Education, Atlanta, Georgia

Program Moderator: Dr. John L. Cameron, Director, Division of Facility Development, U. S. Office of Education, Washington, D. C.

Speakers:

Mr. Frank E. Irwin, Coordinator, School Plant and Transportation, State Department of Education, Nashville, Tennessee

The Honorable Howard Warf, State Commissioner of Education, Nashville, Tennessee

Dr. Donald J. Leu, Professor of Education, Michigan State University, East Lansing, Michigan

Dr. Benjamin E. Carmichael, Director, Appalachia Educational Laboratory, Inc., Charleston, West Virginia

Panel:

Mrs. Minerva Hawkins, Social Studies Teacher, Pearl High School, Nashville, Tennessee

Miss Joan Crawford, Senior, Pearl High School, Nashville, Tennessee

Mr. A. D. Hancock, Principal, Hume-Fogg Vocational High School, Nashville, Tennessee

Mr. Joe Little, Student, Hillsboro High School, Nashville, Tennessee

Mr. A. Randalls, Jr., Assistant Principal, Appollo Junior High School, Nashville, Tennessee

Mr. Mike Bennett, Freshman, Vanderbilt University, Nashville, Tennessee

MR. BAILEY'S OPENING REMARKS

Mr. Bailey: *Ladies and gentlemen.* We are happy that you are here. I welcome you to this conference. It is our hope that it will be a means of improving communication between the many groups represented here, for this is one of our greatest needs.

School plant people get together in meetings, such as the Interstate session beginning tomorrow, and frequently communicate effectively with each other. School boards, school superintendents, legislators, and similar groups, have meetings among

themselves and successfully exchange ideas within their own circles. These groups all have some concern for school buildings, but the problem is that all of their communication is within the circle or orbit, and only occasionally does a bit of knowledge escape from one orbit into another where it can be put to wider or greater use.

School building planning would be improved greatly if all in these groups could reach the unattainable goal of knowing all things. Since this is impossible, the next best step to progress would come by throwing wide open the available channels of communication between groups. These channels are numerous, but we have yet to learn to use them effectively. This conference will assist us toward this end.

I was pleased when I learned the U. S. Office of Education had established the Office of Constructive Services—something akin to the old School Housing Section—and that conferences such as this were being set up around the country. I was also glad that the Interstate group was asked to help arrange the conference. I was even more pleased when we were asked to invite not only school planners and school plant people, but also school administrators, school board members, legislative members, and others representing the whole spectrum of interest in schools. You responded well to the invitations. I hope you will find your time well spent as we consider together designing school facilities for quality education.

As in all such conferences, there are a number of housekeeping and procedural activities that must be taken care of. I am asking Dr. W. D. McClurkin to make announcements concerning registration, travel reimbursement, social hour, and other activities. Dr. McClurkin is Director of the Division of Surveys and Field Services at George Peabody College for Teachers, and also Executive Secretary of the Interstate School Building Service. Dr. McClurkin.

Dr. McClurkin: Thank you, George. **Ladies and Gentlemen:** Peabody would like to add its welcome to those of others in expressing its pleasure at your being here for the conference. Two or three minor announcements are needed: (1) If you have not received the green sheet to be turned in for the reimbursement of your travel expenses, please pick one up at the desk. If you are traveling by air, Government regulations require that your air ticket stub be attached to your expense statement. If you are

traveling by automobile, no receipts are needed. (2) Not on your program but a basic part of the day is "happy hour" at 5:15 this afternoon in the Iris Room at the Hermitage Hotel. After our program adjourns here, we go to the Hermitage Hotel where dinner will be served at 6:30 in the Ballroom.

We tried to prepare name badges in advance. Those for Interstate members have been made out in blue. If any of you guests have any questions or any services you need, please feel free to call upon any blue-badged person. If they cannot tell you or help you they will bring you to some person who can. We hope that today will be a profitable and a pleasant one for each of you.

Mr. Bailey: You have heard Interstate mentioned several times. The Interstate School Building Service is one of the oldest school building organizations in our country. The 38th annual conference of this 16-state group will begin tomorrow morning. We will be meeting on the Peabody College campus where the members are housed in Gillette Hall. We will be delighted to have any of you stay over for that conference. Our program this year is built around maintenance and operation problems at the state level.

I advised Dr. John Cameron of the U. S. Office of Education that if he wanted me to say anything about him in the introduction, he should put a note or two up here on the rostrum. He did not do that. I have known John for a number of years. He was originally in the state of North Carolina in school plant work. He went from there to the U. S. Office of Education where he headed the old School Housing Section for a number of years. Since that time he has been promoted, and it goes to prove that a North Carolinian can do very well in Washington, D. C. John has recently taken on a new job. I really don't know what the title is, so I will let him tell you. He is the moderator of this program. I am asking him to take charge of the program. Dr. Cameron.

Dr. Cameron: I have been so busy getting data on other people I completely forgot George's request that I leave something about myself up here. However, I think he made out much better than he would have had I left something. It is a real pleasure for me to be one of the participants in this one-day conference on quality education with emphasis on the planning of educational parks.

The conference is co-sponsored by the Interstate School Building Service, George Peabody College for Teachers, and the Office of Construction Service, U. S. Office of Education. It represents probably a third of the nation, according to the number of states that are represented.

It is a pleasure at this point to introduce an old friend. Frank Irwin, coordinator of school plant and transportation for the Tennessee State Department of Education, who will introduce the Honorable Howard Warf, Commissioner of Education, State of Tennessee, who will welcome the conferees to Nashville.

Mr. Irwin: Dr. Cameron, Members of the Conference, Ladies and Gentlemen: It is a privilege and personal pleasure for me to have the opportunity to introduce our next speaker. There are some people who look big at a distance but the closer you get to them, the smaller they become. There is another kind of man, the closer you get to him, the bigger he becomes. Nearly five years ago a quiet new force took over in the office of the Tennessee Commissioner of Education and almost at once started proving that a man of character and exceptional ability can give an office dignity and efficiency while at the same time making it a friendly and practical place. He has also proven that you don't have to make a lot of noise to get a lot done because, like the tide in the deep currents of the sea, great movement can come from quieter sources.

I have not the slightest doubt that the present commissioner of education will be recorded in history as one of the most able to hold this office. His monument will be in the enduring bricks and mortar of Tennessee's new school buildings and programs. He came to this office with a rich background in public school service and administration. He has demonstrated through his knowledgeable, unassuming manner and untiring services an unusual capacity for getting things done.

We have seen in the last five years the greatest inception and development of new programs and the greatest expansion of existing programs in the history of our state. Improvements have been made in the salary schedule for teachers, in pupil transportation programs, special education programs, instructional materials programs, teacher retirement program, and others. In the area of building alone, the accomplishments of his administration have been unexcelled. Under his guidance, the network of television stations has been initiated and built to bring this media of

learning into classrooms that will serve at least 98 per cent of all the school children in our state. He has supervised the location and construction of 22 vocational and technical schools that have put this educational facility within reach of practically every person in Tennessee.

The state's first junior college program was initiated under his administration. This year, three new junior colleges will be in operation, and the locations have been selected for two which are now in the planning stages. He has also been involved in the construction of additional buildings on the state university campuses which have almost doubled the physical facilities. During his administration, 5,000 new teaching stations have been constructed for the public schools of our state at a cost of approximately \$150,000,000.

If time were available, I could tell you much more about the dedicated services that he has rendered to his staff and to the people of this state, but I think perhaps the best tribute to this man is from the teachers themselves who have twice honored him with special tributes. Again, I want to say it is a privilege and great honor to present to this audience our esteemed Commissioner of Education, the Honorable J. Howard Warf.

Mr. Warf: Mr. Irwin, Mr. Bailey, Dr. Cameron, Distinguished Guests: It has been said that there are three very difficult things for an individual to do. One, to climb a fence that is leaning towards you; two, to kiss a girl when she is leaning away from you; and three, to respond with proper humility to a flattering introduction. It has been some time since I have climbed a fence or kissed a girl, except the one I married, and as for the introduction, I have found that flattery is somewhat like smoking—it won't hurt you unless you inhale. Aside from the disappointment I feel at finding I have a man working with me who handles the truth somewhat lightly, I am very grateful. In all seriousness, when he is talking about something he knows something about—like buildings and safety standards, for instance—Frank Irwin is at the top of his profession.

You are here to dedicate this day to building for quality education, with major emphasis on educational parks. There is a lot to be said for that good old English word quality. Someone told me that at Harvard University the card catalog in the agronomy section doesn't refer to corn and hogs. At Harvard it is maize and swine. There used to be a sign on the most expensive men's

store in my hometown that said something like this: "We have no quarrel with those who sell clothing for less. After all, they ought to know what their merchandise is worth."

What is quality education? Certainly I wish I could close the matter quickly by saying that it is entirely a matter of money. Just get enough money and build the most expensive schools and staff them with the highest paid teachers and you are bound to have quality education, according to some sources. If that were true, the three most important subjects being taught in American education would be golf, dancing, and contract bridge, because the three highest paid teachers are Sam Snead, Charles Goren, and Fred Astaire.

Certainly we refer to a lot more than money when we talk about quality education. It takes brains, vision, and imagination, and it takes something not so easy to define. It takes something of yourself in it. That is why it is so important that these distinguished experts have met here today. They know how to look into the heart of a school and see more than bricks and mortar. They know how to look into it and see all the ways to education. We had an old banker who saved up his money and finally took a trip to the Holy Land. As a side light he went to see the Pyramids. He had only one comment. "Sure is a heap of masonry not to be bringing any rent." Now that can be said about any school if you look at it that way, but schools are not buildings alone. Buildings can be schools but schools are not necessarily buildings.

It has been said that the building is only the launch pad. One of my favorite expressions is one that our Governor Ellington used: "The ladder of opportunity here in America leads up to the stars but the bottom rung rests within a schoolhouse." While the school may be only the launch pad, it must be exactly the right launch pad for the mission it is to house. It must be built well. It must incline properly, and it must point to the planets. These are the absolute imperatives, but in the bargain—when it is certain that these things are true—it must also be comfortable, safe, durable, and efficient.

You are the men who can guarantee that the schools of your state and mine shall have this extra dimension, and in all of that extra dimension will be yourselves. There is a well-worn piece of verse and nobody knows for sure who wrote it. It isn't great poetry, but I think it says something about why you have come

here and about the extremely challenging tasks that lie ahead of each of you:

I watched them tearing a building down
A gang of men in a busy town
With a "ho heave ho" and a lusty yell
And a sidewall fell.

I asked the foreman, "Are these men skilled?"
The men you would hire if you had to build?
He laughed and said, "No indeed
Just common laborers is all I need."

I can easily wreck in a day or two
What builders have taken a year to do
I thought to myself as I walked away
Which of these roles have I tried to play?

Am I a builder who works with care?
Measuring life with a rule and a square?
Am I shaping my deeds to a well-made plan?
And patiently doing the best I can?

Or am I a wrecker who walks the town
Content with the labor of tearing down?

Builders and planners for the schools of tomorrow. I have the privilege of telling you how honored we are that you have chosen Tennessee for this important meeting. Our facilities are at your disposal. We want to thank you for coming and to ask you to come back at any time. Best wishes for a most successful conference. Thank you.

Dr. Cameron: Thank you, Commissioner Warf.

DR. CAMERON'S ANNOUNCEMENTS

Dr. Cameron: We would like to ask the first speaker, Dr. Donald Leu, to come to the podium along with the interrogators. While they are coming to the platform, I will describe briefly what the general approach to the day's activities will be. After Dr. Leu has spoken, and again later in the morning after Dr. Carmichael has spoken, opportunity will be provided for some local panelists to react to the speakers' remarks. These people are from the Metro school system of Davidson County and Nashville.

Following Dr. McCarthy's talk on the educational parks plans in New York City, two teachers from the New York City school system will serve as panelists. These two young men have been working with the exhibit. I hope you will take from 40 to 60

minutes to look at the exhibit for it takes about that much time. These men worked with it when it was in Palo Alto for the Conference on the Schoolhouse in the City in July. The exhibit has been in the Union Carbide Building in New York City on display for two weeks, having left there on Monday. It will be here today, then move on to Chicago where it will be on display at the Civic Auditorium for a couple of weeks. From there, it will go to Detroit for the National Council on Schoolhouse Construction meeting in October, then on to Pittsburgh, Baltimore, Washington, Providence, Rhode Island, and several other cities. We would like to have your comments and suggestions.

Our topic today is quality education. As indicated earlier, we are concentrating on educational parks. George Bailey says there is a lot of interest in this part of the country, but very little up to this point has been done.

ADVANTAGES AND DISADVANTAGES OF EDUCATIONAL PARKS

Donald J. Leu

Dr. Cameron: I have known Don Leu for some years. He is a member of the board of directors of the National Council on Schoolhouse Construction. He is a professor of education at Michigan State University. In addition, he is conducting many surveys, including one in the little city of Chicago, and is working in South America, Europe, Asia, and, occasionally, in the United States. He is doing a special study on educational parks. Knowing Don as I do, we will not be getting just one side of the picture. That is the reason his topic is listed as it is—*Advantages and Disadvantages of Educational Parks*. Dr. Leu.

Dr. Leu: Thank you, John. *Distinguished Guests:* I am here to learn along with the rest of you and to have some fun—the fun of learning more about this strange animal called the “educational park,” which is a misuse of the name. If you are giving a prize for the longest trip to attend this meeting, I should get the prize. My family and I are camping in the Glacier Peak wilderness area in the Pacific Northwest on the edge of a glacier. I left early yesterday morning and I hiked seven miles. I took a horse. I took a boat ride down the Shalan Lake, a car, a plane, another plane, and a cab to get here.

What I would like to do is try to define this monster called the

educational park and report a little bit about the historical development. What are some of the existing parks? Is there a rationale for the park? What are the claimed advantages of the park? What are the disadvantages of the park? Are there criteria for evaluating various proposals for educational parks? And then I will try to project a little bit into the future before we throw ourselves onto the mercy of our interrogators. Let me start with a definition. I don't like the term "educational parks." I call them educational cultural centers. We get confused about parks—thinking it is a green place. Some of our parks are not green.

I define an educational cultural center as a clustering of large groups of students of wide age differences, along with staff, programs, and facilities on one site. It provides for internal sharing wherever possible—facilities, faculties, supporting services, and administrative staff. It provides both education and social services to private, public, and parochial children and attempts to coordinate its services with other governmental agencies and services such as highways, parks, housing, libraries, museums, and social services. Having said that, many of the so-called educational parks have been eliminated.

I was amused in Atlantic City where we have an annual AASA building exhibit. The thing to do each year is to call your buildings or program whatever the current cliché is. This year it is middle school. We have junior high schools that have become middle schools, and we have large school buildings that have suddenly become educational parks.

Let's talk about the historical development for a moment. It is not a new idea. Most ideas in education are rediscoveries of old ideas. The original one-room country school was our first educational park where we brought together diverse children of diverse grades into what was considered a large organization at that time. Prior to that time they were educated in the home. Our reorganized rural school districts which many of us have experienced and are experiencing are the second stage of the development of the educational park. Many of them were K-12 school buildings where we brought rural youth into a central setting, and we made all the same mistakes that we are making again today.

The first real educational park as it is known and defined by my definition is very, very recent—1894. Preston Search, Superintendent of the Los Angeles, California, schools had a proposal

for a school park for 5,000 students—all of the students of Los Angeles. He proposed 200 acres for an entire city school population. He had gardens, he had internal transportation, and he had each grade a community. He had a high school park separated by gardens from a primary park, by a lake from a playschool, by more gardens from a grammar school and from a sports field. The center core was administration. My point is that this new discovery was first proposed in 1894. It didn't get off the ground either. Then, Charlie Colbert proposed an educational park in New Orleans in the 1950's. One of the architectural journals ridiculed his proposal as "The New Orleans Fantasy." Thus, the historical development of the educational park is a relatively slow phenomena.

What about some existing educational parks or educational cultural centers? I'll just use a sampling to give you an illustration of what is now in existence, which is virtually nothing. Most of you know about the Nova School in Ft. Lauderdale, Florida. According to my definition it is not really an educational park. It's one site where they have an elementary school, a high school, and a junior college—a very exciting adventure. On the other hand, it's really bringing together sub-schools on one site. Evanston, Illinois, for years has had a secondary school educational park where they have brought together 5,000 students and divided them into four separate schools. New Orleans has a so-called educational park, established predominantly for Negroes. It goes from kindergarten to senior high. It was established primarily as a quick economical way for new space.

I was working in Europe this last year and I stopped off at The Hague. The Hague is planning an educational park—a park for children of diverse nationalities of all grades. Out of Brussels, where I am working with the Department of Defense, we are planning an educational park for Canadians, Americans, English, and Germans. The French don't want to go there. We all have trouble with the French. We are planning a K-12 educational park for the Department of Defense. I am working in Thailand where we have an educational park that I will discuss later. In Mexico City, there is a K-12 educational park, but now they are moving back toward satellite elementary schools. Acton, Massachusetts, has a K-12 educational park for 2,000 pupils, primarily replacing obsolete neighborhood elementary schools. Youngstown, New York, has a Grades 4-12 educational

park for 3,000 pupils. New York City has some educational parks, but since Dr. McCarthy will discuss these this afternoon I will skip any mention of the New York City educational parks.

Well, those are some of the existing partial parks. Are there some being developed? Yes. If you are in educational administration, you are nothing without a park plan. So everybody has a park plan and there are all kinds and diversities. For example, East Orange, New Jersey, a small high density compact community, is planning a K-12 educational park. However, they are going to establish their Grades 5-8 middle school first, to be followed by a 9-12. Then if it works they will move on to the primary, or they may stay with their local primary units. Berkeley, California, claims an educational park. I was out there planning one. It is actually a two-year high school. St. Paul, Minnesota, is planning one. Syracuse, New York, is planning an elementary park. I am working in Grand Rapids, Michigan, on an educational park and I'll come back to that later. In Chicago, Illinois, we are working on a series of parks. Pittsburgh, Pennsylvania, has the "great high school" concept, which is a variation of parks. Seattle plans an intermediate center which is for Grades 4-7. Anniston, Alabama, and St. Louis, Missouri, are planning parks, and I could go on and on and on. Many of us use certain cute names to label diverse goals, but everywhere now school systems boast of planning educational parks.

What is the rationale for parks? Well, primarily it is a world of change, a world of high density, a world of rapid transit, and a world of rapid socio-economic political change. We are moving toward large units in business, in government, in industry, and in education—primarily in the name of efficiency and effectiveness. Of course, the obvious danger is that we lose that magic number one called the individual—although we do not automatically lose him. There are many changes that many people have not thought of that are causing us to look seriously at educational parks. I will give you just one example. It is probable, in my opinion, that every local school district in Michigan and in the United States is illegal and unconstitutional. That, of course, is a wild statement. I don't expect a consensus or agreement, for this is not what we are seeking at this kind of meeting. Since the 1954 Supreme Court case, the Court seems to say that it mandates equal educational opportunities. When I look at school districts in my own state, in which one is spending \$400 per pupil and an-

other school district is spending \$1,200 per pupil, it is obvious they are unequal.

Local education is a function of the states, not the national government, although we sometimes get confused on this. Local school districts that have been created by the states are creatures of the state, and we have many local school districts in every state in which unequal education takes place. The inequity between \$400 and \$1,200 per pupil is so obvious it is only a matter of time in my humble opinion before we are going to have this issue in the courts. The courts are going to mandate a state system of education, and the first thing they will do is to decentralize the state system again, but they will decentralize in different ways. Well, that's just an opinion to show you that there are all kinds of socio-economic political changes on the horizon, and that many of our existing conceptions of what education is are rather obsolete.

Now let me get into the meat of this in terms of what advantages are claimed for the educational park. Some of the advantages claimed for the educational park are:

- It brings together children of a much wider range of economic, social, and cultural backgrounds, hence tending to overcome the narrowing influences of the severely stratified neighborhood.
- It brings about desegregation and integration. In my definition, those are two different terms. In an educational park you can desegregate quite easily. Integration is a deeper term with greater meaning and you can prevent integration within an educational park.
- It would eliminate the inequalities of facilities, staff, and program that are inevitably characteristic of neighborhood schools and sites.
- It would equalize educational opportunities.
- It could retain the element of commonness to our free common public schools giving more children a wider set of common experiences that, in turn, would lead to better communication and a better community.
- It would make possible groupings and regroupings of children on purely educational considerations.
- It would give a unique opportunity for planning a total environment to support and facilitate the best education we

know how to provide—the total educational needs of a wide range of children. Conversely, we can make one grand mistake.

- It would carry the advantages commonly attributed to size—such as specialized services and facilities—that could only be justified by the utilization potential of larger numbers.
- It would set the school apart—an object of community pride and respect.
- It would enable a better controlled "value" atmosphere.
- In large cities, it offers a golden opportunity for partial decentralization. It can be largely self contained.
- It presents unique possibilities for greater flexibility in organization—such as K-4, 5-8, 9-12; K-3, 4-6, 7-9, 10-12.
- It gives improved opportunities for coordinated continuity in curriculum planning.
- It makes possible a much greater individualization of curriculum and flexibility of pupil assignment. Fourth graders may join a high school chemistry class or a tenth grader may work with fourth graders in certain activities.
- It gives opportunity for carefully selected multi-age activities reducing by a little the peer group tyranny of the greatest school system. Conversely, you could take many of these arguments and turn them around the other way.
- It removes children every day from the neighborhood handicaps and extends the opportunity for the development of mutual respect among widely differing groups and cultures.
- It greatly increases the time available to certain specialists who now waste a great deal of time in travel between the schools.
- It brings together at least some of the richness of staff and service available to the individual schools it consolidates.
- It makes possible grouping and regrouping of staff for a variety of purposes and considerations—team teaching, large group instruction, etc. Physical proximity and shared interests would encourage individuals to cross more traditional boundaries. One high school French teacher, for example, might not only be a member of French and language groups in a high school faculty but might also

share travel enthusiasm with a primary school teacher or group.

- There are real possibilities of economy in many supporting services such as food preparation and handling, supplies and equipment, and many other operating and maintenance activities. The greater use factor would justify mechanical and electronic devices of many kinds.

I have spent a lot of time making a comparative cost analysis of educational parks in contrast to traditional solutions, and I will summarize it briefly. If you want to get into a great deal of detailed information, we can do this at a later date. We took some standard educational specifications and building programs for several large school districts, and then made a cost estimate based on today's market for elementary schools, middle schools, junior high schools, and senior high schools for roughly 15,000 students. Then we used the same cost estimates and the same specifications for a 15,000 pupil educational park. Our evidence seems to indicate that the building cost of the same standard educational specifications would be between 12 and 16 per cent less for the educational park. That's just the building cost. In other words, site acquisition would be somewhat lower, but the actual large units, avoiding duplication and the like, would result in a 12 to 15 per cent cost reduction.

But this is a misleading figure, and many people are using it wrongly. I want to set the records straight on that. This estimate ignores transportation costs, and you must price transportation costs for educational parks, for a large number of students would have to be transported a long distance on a continuous basis. The transportation cost would more than eat up the 15 per cent reduction in the initial capital outlay cost. So a third factor should be considered. It's a little bit like the time my wife talked me into buying a home freezer because we were going to save 15 per cent. I am still looking for that 15 per cent but I'm sure eating a lot better. An educational park is somewhat similar. The ones we are in the process of planning are not coming in 15 per cent less. If anything they are coming in 15 per cent more, but we are providing better spaces and better facilities than we could have provided in a typical high school, elementary, and junior high school complex.

I merely point out to you that you should not go into an educational park on the basis of economy. I see no real economy in

it. By the way, I sound negative while I'm giving these positives. Actually, I am enthusiastic about certain modified uses of educational parks. But I am sick to death of people calling it the penicillin and the wonder drug, or a superintendent going down to a convention and talking about his educational park as if it were going to solve all the problems of education. I am very optimistic about the potential of educational parks, but there is too much quackery going on right now.

Now, let's get back to the advantages offered by educational parks:

- There is a possibility that such a concentration of children would make easier the operation by religious bodies of after-school, released time, or shared-time programs in educational parks. The educational park has a lot to say for public schools providing education for nonpublic school children. I think it's one of its strongest advantages, and we're using it extensively. In fact, in Chicago, Grand Rapids, and others, we are planning educational parks cooperatively with the parochial schools. I think it would be a good experience to have parochial school children in public educational facilities. In the United States the *only* place where all of our children come together is in public schools.
- It provides more opportunity for cooperative planning by city planning agencies, park boards, museums, colleges and universities, libraries, social agencies, and other governmental institutions. It gives us a triggering device to sit down and plan a total community and the educational service systems.
- The last advantage is that there's always a great advantage to planning a new educational enterprise where you can sit down and rethink through the purposes of education and the ways of achieving them. It can serve as a triggering device for curriculum improvement and enrichment.

These are the advantages as I see them. I am sure you have others. What are the major disadvantages? (Again, some of these disadvantages can be twisted around to advantages.)

- One is in the loss of the school to a neighborhood. Unfortunately, the fact is that most neighborhood schools,

however, aren't neighborhood schools. They are islands in the neighborhood. But we do lose the neighborhood school.

- It takes the teachers out of the neighborhood, reducing greatly the opportunity for them to know and understand the children's environment and their particular family circumstances.
- It turns its back on the chance for neighborhood schools to be centers of community activities in municipal and voluntary agency services. If we went to a total educational park and we moved all education services from the local neighborhood we would have destroyed one of its support systems. Unfortunately, the fact again is that most neighborhood schools are not neighborhood schools, so you have not destroyed too much of most situations.
- It calls up fears of alienation of children from their homes and neighborhoods. For example, in Israel they have the Kabutzen which is very similar to this. In Communist Russia, there is the extreme socialistic use of the school as a propaganda weapon to impart in the child an alienation from the home and the value of the home. The larger the unit, the greater the danger. We should recognize this.
- It vastly increases the problems of transportation and accompanying problems with children. In some of our first experiments, transportation is not only a cost problem but there are many, many problems of discipline, time, already overtaxed streets, and the like.
- It greatly reduces the accessibility of the schools to concerned parents and handicaps home-school conferences and cooperation.
- It may too early mingle children whose home, neighborhood, and out-of-school lives and background experiences are radically different. Research seems to discredit that disadvantage. Much of the most recent research of Pettigrew and other social psychologists seems to say that the younger the children mix and the earlier they mix, the more successful is the mix.
- It runs all the risk of bureaucracy—any large organization necessarily demands more rules and procedures. Whether they are democratically or autocratically decreed is irrelevant; they exist.

- It makes one more place of vastness in peoples' lives almost overwhelmed by endless masses. We are doing some very creative things in terms of internal decentralization. The question of the number of children on a site or in a building is not nearly as important as what you do with those children on that site and how you internally decentralize.
- It provides a terrifying temptation to reduce variety, to plan too efficiently, and to build too rigidly. One of the great strengths of American education has been some of the diversity in experimentation.
- The mingling of children over so wide an age range works against the opportunity to build personality and character through peer group relationships.
- Its cost may be very large. It seems easier to sell ten \$5,000,000 schools than one \$50,000,000 school.
- It calls for us to abandon many school buildings that are at least structurally sound. Most of them are structurally sound and educationally obsolete, but the educational obsolescence doesn't show.
- It results in a single huge facility that moves massively and uniformly towards its obsolescence. In other words, you are going to have a lot of obsolete facilities on your hands at one time.

Well, those are 14 disadvantages. Let me get back now to some of the models that I would like to talk about. My presentation sounds like a pessimist describing the educational park. I do not wish to convey that. I'm an optimist about the potential of the educational park. I'm a pessimist about some of the quacks in the business. Now, how do you compare an educational park proposal with the existing standard school building organizational proposal? It seems to me there are certain criteria that you need to look at. You need to go back to your purposes or use for education. If your purposes are to increase desegregation and integration, for example, then you can achieve more desegregation and more integration in an educational park. If your purposes are to mix diverse socio-economic groups, you can do it more easily in a park. A second criterion is program. You have to weigh this educational park proposal in terms of its program. What does it offer to children and youth? Is it better or worse?

We spend a lot of time in curriculum and program evaluation examining various alternative proposals. You have to look at its cost and you have to look at its public acceptance.

I like your theme of "Quality Education." I have found as we move toward educational parks in several communities that I can't sell desegregation and integration to a school district public. I can sell quality education. Again, we are not here seeking consensus, but I merely point out that quality education is something that all Americans want, whereas the American public is split on desegregation and integration. I'll say quite frankly that I am committed personally to desegregation and integration under carefully controlled conditions. I have a hunch a lot of you differ and disagree with me. I'm not for the willy-nilly things which I now see, but my point is that if you are going to measure an educational park you will have to measure it against some criteria. Let me look now into the future.

I want to use four models. In Sault St. Marie, Michigan, we are planning an educational park with a total population of around 20,000 residents. Here on one large site we are bringing together the library, the museum, the conservation, the social services, the governments, recreation, and parochial "cafeteria education." In other words, the parochial schools can dip into this school for that part of the educational system they want. All public schools are on one educational park. It's in the planning stage. It is being done in cooperation with various agencies. I'll describe these quickly as I see you have a larger presentation on that facet of an educational park.

We are planning an educational park in Grand Rapids, Michigan, a town of 200,000. In this city we have an existing community college, an urban renewal project which means a massive re-clearing of a large part of the down-town city, and cooperation with the museum, the library, and the hospitals. This educational park will be for Grades 11, 12, 13, and 14, along with special services for the rest of the community. For the eleventh graders, one-fourth of their time will be in the educational park, getting services that the local high school cannot provide efficiently and effectively. Twelfth graders will spend one-half of their time at the educational park. Thirteenth and fourteenth graders will spend all of their time on a come-in dip-in basis. In addition to that, we are providing what we call supplementary centers, continuous planning centers, inservice training, instruc-

tion, continuous service programs, all a part of an urban renewal project. To me this has a lot of potential and a lot of possibilities for Grand Rapids. We could do away with many obsolete buildings, we've moved to a middle school complex, etc. I emphasize that the Grand Rapids plan may not make sense for your community. It's one way of designing an individual solution for one community.

Let me move quickly from 20,000 in St. Marie and 200,000 in Grand Rapids to 2,000,000 in Chicago. In Chicago, I am directing a feasibility study of educational parks. The first answer we have is that educational parks are not a final answer for Chicago. We are making what I call a continuous coordinated educational grid system, whereby we are looking at all elements in Chicago, including city planning, urban renewal, housing, transportation and traffic arteries, the parochial schools, the existing buildings, and so on. We will end up with educational parks. By the way, they will probably be on pods out in Lake Michigan because all the land is gone, and we think it is cheaper now to reclaim part of Lake Michigan and use it for recreational and educational purposes. The educational parks will be what we call supplementary centers, large group centers—highly specialized vocational and technical. These will have a large group of people in for a great variety of services. We hope to piggy back them on the colleges and universities, so that the colleges and universities will have the opportunity of getting into the business of resaving or rebirth of the central city.

We have a plan which we call the recycling of the central city. Contrary to what most people think, the central cities are not dead. They are starting to recycle. Before too many years many of the suburban neighbors who have turned their backs on the central cities will be facing the problems of the ghettos, the slums, and the low economic groups who will then be moving out of the central cities into those 50 foot lots we are putting out in suburbia today. So we are planning a coordinated educational grid system which will have educational parks as one component of it. But again I don't want to sell it as a solution.

I will cite one other educational park. I moved from 20,000 to 200,000 to 2,000,000. Let's move to 20,000,000. In Thailand where I'm working as an educational planner, we go into a local village and find a boy's vocational school, a girl's vocational school, a boy's academic school, a girl's academic school, a boy's private

high school, a girl's private high school, all of them of less than 150 in size. All of them are completely obsolete and antiquated. We are planning educational parks for Thailand. I'm not suggesting that you adopt the Thailand plan, but some people are making suggestions just as ridiculous—as if there is one solution for every district, and there isn't. Now let me see if I can summarize so we can keep on schedule.

I think educational cultural centers are here to stay. We will see an acceleration of them. In my humble judgment, you can't sell desegregation as a way of achieving an educational park. We are recycling our central cities. There is no one solution. Each must be individually designed. The park is not a panacea or a wonder drug. It's part of a systems approach to planning. Contrary to existing data, the park tends to be slightly more costly. This is especially true when you add in transportation costs. It must be individually and carefully planned—namely, the educational, cultural, recreational grid system.

It seems to me that we are facing an exciting age for educational leaders and educational planners. The last two years have been exciting for me as I have engaged in both research and planning educational parks. But there are some basic questions that need answering.

1. Who will do educational planning? Unfortunately, much of the planning of educational parks is being done by vested interest groups who do not have as their primary consideration the individual youth or the total youth of the community. They're selling something, such as social theory or electronic equipment.
2. Who will propose educational solutions? Educational leaders or others?
3. Who will provide educational leadership? You and I or the noneducational leader?

It seems to me that we are in a very fortunate and exciting time in our history. Our school systems or educational programs are all evolving in dramatic and rapid change. If I had sufficient time I would like to describe some of the exciting changes taking place in curriculum and in program. You and I are going to have to provide the leadership in making this decision of whether we shall have an educational park, and, if so, what shall be its characteristics?

PANEL DISCUSSION

Dr. Cameron: I would like to introduce the panel members and then see if I can determine the two who have the most urgent desire to make a comment or ask a question. Then I ask that they all reserve their other questions and comments until we have had a coffee break and Dr. Carmichael has made his talk.

At your far left we have Mrs. Minerva Hawkins, who is a social studies teacher at Pearl High School. Next to her is Joan Crawford who is a senior at Pearl High School. She likes social studies also. I don't know whether she said this because she is with her teacher or not. She is a member of the Dramatic Guild. To my immediate left is Mr. A. D. Hancock, principal of the Hume-Fogg Vocational High School here in Nashville. To my immediate right is Mr. A. Randalls, Jr., assistant principal of Apollo Junior High School. Next to him is Joe Little, student at Hillsboro High School. He is interested in science and mathematics and plays guard on the football team—missing practice this morning, I understand, because of his contribution here. Then we have Mike Bennett, at the end of the table, who recently completed Joelson High School as a graduate and will be entering Vanderbilt University this fall in the field of political science. Now, who feels a real urge to make a comment or ask a question? Joan?

Joan: I would like to ask Dr. Leu this question: "Don't you think to combine the parochial, public, and private schools into one cluster would create a problem because of the different teaching in the parochial schools in regard to religion?"

Dr. Leu: Yes. Every time we bring about a change we create a lot of problems and unanticipated problems. I don't believe in providing free public tax monies to parochial institutions. I want to make that clear. I do believe in making public educational facilities and programs available to the parochial school children. There would be a lot of problems. You have to do some careful preplanning, you have to think in terms of commitments, and you have to have really a habit of planning. I work with the diocese leaders, school superintendents, and the public. We cooperatively plan these programs and some of them are working out beautifully. What do you see as a problem? Is there something I am missing?

Joan: No, the only problem I would see is the different teachings in the school.

Dr. Leu: Oh yes, I see, and actually that is the parochial school's choice. I've worked with Catholic, Jewish, Christian, and so-called Dutch Reform. That's their choice. Now many of the Catholic schools have given serious consideration to going out of the educational business. They could make that choice or they could make the choice of staying away completely from the educational parks. Once they go into the educational parks, they may go in there for science if they wish, or mathematics, or social studies, or guidance, testing services, or whatever they so choose. It would be separated from their parochial teaching. They have to make that choice. They can't have their cake and eat it too.

Dr. Cameron: Is there a second question or statement? Mike?

Mike: In the last few years we have had a lot of difficulty in our nation with dropouts in school and also with misfits due to a particular undesirable environment. Don't you think that by throwing students into this large complex that you are actually forgetting that the student is an individual and that by being thrown into this group where many people will possibly be superior to him he would feel that he would not be wanted in society and therefore this would contribute to our problem?

Dr. Leu: Mike, I'm really down here looking for football players for Michigan State. Seriously, you have asked a very important and crucial question about the educational park. I would disagree with you since we are not seeking agreement. I would say that our existing school system has miserably failed the dropout or the pushout. Now, I am generalizing and we have a lot of very dedicated teachers, but we have provided these programs for dropouts. We have provided largely the academic program in a "shapeup or shipout" attitude. A lot of them have chosen to ship out. I would say that the Job Corps, which to me is a dismal failure, and other programs such as that are in response to the failure of the public schools to provide programs for the potential dropout.

Our Grand Rapids program is a program designed to start students where they are, accept them as worthy human beings with potential for learning and growth, find a program that does provide interest and jobs and ability, and wait for some of them to

mature. Now, I noticed Commissioner Warf mentioned a junior college or community college here in Tennessee. One of the side benefits of the community college in our state, and we have about 30 of them, has been that a lot of kids have grown up during those two years and have become excellent students. I would say the educational park could provide a better environment, a better learning experience, and better opportunities for the potential dropout than the existing, traditional, academic high school. We could argue this back and forth.

Dr. Cameron: We will pick this up again after the coffee break. You will notice that in the afternoon we have one session devoted specifically to opportunities for questions from the audience and to participation on the part of the audience. We will also have an opportunity for some discussion just before the noon hour.

- We recess for 15 minutes and come back at 10:45, at which time Dr. Carmichael will address us.

EDUCATIONAL PARKS: APPALACHIAN STYLE

Benjamin E. Carmichael

Dr. Cameron: Educational parks are generally thought of as being possible solutions to problems in urban areas. I think it is of particular interest that some studies are underway that involve the possible use of educational parks as solutions in some of the more rural areas. We are fortunate this morning to have with us a man who has served as teacher, principal, and superintendent of schools in the city of Chattanooga. I might mention that we have a daughter just graduated from the University of North Carolina and now in graduate school at Duke. She was home just a few days ago and she said, "Do you know anything about the Chattanooga schools? She was looking at her annual. I told her I knew two or three of the superintendents who had been there. I believe Lawrence Derthick was there at one point. Dr. Letson, speaker tonight, was there, and our next speaker was there. I asked her why she wanted to know. She said, "Almost without exception, among the students that come from out of state to the University of North Carolina, those that come from Chattanooga are among the most outstanding that we have had. I think that speaks well for the men who have served with the Chattanooga schools.

Dr. Carmichael is presently director of the Appalachia Educational Laboratory in Charleston, West Virginia, and he will describe some activities that he is contemplating in that region. Dr. Carmichael.

Dr. Carmichael: Thank you, John. Occasionally, we can say "Thank God" for that good student or two that makes a good record. I happen to know one particular girl that John's daughter is talking about. She would make a record for you which would suffice for hundreds of others who might not. We have felt that way about the schools in Chattanooga, however, and are delighted that by some coincidence we would get that kind of credit for it.

It is a pleasure to be with you this morning. With apologies to your program chairman, I took the liberty of changing the topic of my presentation to "Educational Parks: Appalachian Style." It has now become fairly widely known that the Appalachia Educational Laboratory has made a major commitment to the development of a concept very closely associated with the

ideas that you will be discussing in this conference concerning educational parks.

You will recognize that I am speaking from the viewpoint of a person associated with the new regional educational laboratories. Secondly, in view of the fact that I am associated with the Appalachia Educational Laboratory, it is obvious to you that my major concerns would not be with the development of the educational park for urban areas. Appalachia is rural. Isolation is a major problem. It is doubtful, therefore, that the educational park, as it has generally been conceived, could be proposed as a plausible solution to Appalachian educational problems. More important as a point of reference, however, will be my emphasis on the educational park, or Educational Cooperative as we choose to call it, as a process of education—new educational practices, depending heavily upon the design and use of new educational facilities to provide access to quality education for the youth of Appalachia.

We in the Laboratory have devoted our efforts to the assessment of needs in Appalachia, the adoption of a mission for the Laboratory which is appropriate for the unique function of a laboratory, and the formulation of a rational strategy for the achievement of that mission. Quickly, I will lead you through a limited amplification of these ideas.

Its broad mandate is to initiate change for the improvement of education by speeding the intelligent application and widespread utilization of the results of educational research. It was introduced into the educational scene, not as a part of the established structure of education and not to function as a college, university, or research and development center. It has no legal basis for intervention into local practices through state departments of education or local school systems, nor does it have any authority or precedent for intervention into the activities of colleges and universities. It must gain entry and involvement through its unique mission and the quality of its performance in achieving that mission. There is need for a higher degree of mixed and greater cooperation between and among state departments of education, colleges and universities, and local school systems in order to effect changes and improvements in classroom practices and educational processes. Strong implications for work, of course, are to be derived from the region served.

AEL has studied its region. It has received much support and assistance from representatives of state departments of educa-

tion, local school systems, colleges and universities, and laymen. The Laboratory has developed a logical structure for its program of work, progressing from the recognition of the unique function of a regional educational laboratory through an assessment of needs and problems, the definition of a single problem appropriate for attack by the Laboratory, the identification of a mission, and the formulation of a strategy to achieve that mission. The region has a high proportion of small schools; financial support is very low; practices have not been updated; sufficient numbers of well-prepared teachers are not recruited and retained; and specialized instruction in many fields is inadequate. The system is a product of the geographic, economic, social, and political antecedents and conditions.

Regional isolation and geographic barriers within the region preclude the progress that is needed immediately. Schools and educational practices are captives of the economic, social, and political systems of the region. Educational leadership with its present support, or in face of the existing obstacles, cannot overcome these limitations. Facilities cannot be updated rapidly enough. Personnel cannot be trained sufficiently. There is not sufficient receptivity, know-how, and skill to assimilate and employ research findings. There is not enough time or resources for adequate educational development, diffusion, and institutionalization by the grassroots approach—teacher by teacher, school by school, system by system. Many conventional practices are obsolete and under attack.

How can we meet such a multitude of needs? Is there a central problem that we should attack? What is the appropriate program rationale for a regional educational laboratory in this educational scene?

In rapid order, I will answer these questions as we see them.

1. *Statement of Problem:* That major changes in education that would affect the region and offer a breakthrough in educational practices cannot be implemented through the existing structure of education by using the conventional approaches to the change and improvement of education.
2. *Mission of AEL:* To create a system of educational practices through the extensive use of communications media and mobile facilities which will provide access to quality education in Appalachia.

3. **Proposed strategy:** To develop, diffuse, and institutionalize a network of Educational Cooperatives, involving the cooperative action of local school systems, state departments of education, and colleges and universities, by employing the extensive use of modern technology, new instructional media, and mobile educational facilities.

These ideas and the complete rationale for the Laboratory program are contained in the *Program Prospectus for AEL* approved by the Board of Directors, August 1, 1967.

Of major interest to you and most significant for this conference, I believe, will be a brief description of the Educational Cooperative. The Educational Cooperative is envisioned as the end product of a combined effort by several local school authorities to provide access to quality education through a system of communications, mobile facilities, and data processing techniques. It would be an operational concept embodying the capabilities and services needed to serve all of the schools and school systems creating and comprising it.

In terms of educational services, the Educational Cooperative would function as an educational park. The Educational Cooperative would link all individual schools by the extensive use of new technology, communications media, and mobile facilities. Each member school would, in effect, be a part of one large school or educational center. Some precedents for the Educational Cooperative are the educational parks or educational plazas, the PACE Centers, and the various forms of intermediate and service center units.

Yet, the proposed Educational Cooperative would be different from all of these. Students and teachers would not be brought together in one location or building, but they would enjoy and receive the advantages of one large unit. The Educational Cooperative would not feature a single educational function. Every phase of education that could be strengthened through the application of the concept would be included. It would be integrated and interfaced with the individual school and school system operations. Functions and activities such as instruction, the library, athletics, student clubs, etc., would constitute the cooperative just as they are part of an individual school. The cooperative would be a school of many parts.

The Educational Cooperative could be considered a noncontiguous educational park brought into reality through the creative

use of today's technology of communications and mobility. The Educational Cooperative would feature a high degree of modular planning and utilization. A module is a unit designed to meet certain specifications. For Appalachia, such specifications would include size and weight suitable for mobility under Appalachian conditions. Many of these modules should be designed so that they can be used by the student without the assistance of a teacher. Into these modules could be placed all materials for creating an educational environment—books, guide sheets, backup films, tapes—all designed for mobility and utility, light and easy to transport, and ready for instant use. These ideas and practices, and many more should be implemented through the Educational Cooperative. It is envisioned that simulated learning environments, team teaching, teachers contracted for 12 months, 12-month school activities, and individualized programmed instruction would all be highly significant features of the cooperative.

The concept of the cooperative cannot become a reality without a high degree of cooperation by basic educational units—the local school systems. The need for this cooperation is predicated on the thesis that most rural school districts in Appalachia cannot make quality education accessible under present limitations. Through joint cooperative action, with sufficient assistance from colleges, universities, and state departments of education, it is believed that they will advance rapidly to equal and even surpass the quality of education provided in the superior school systems of the nation.

The name Educational Cooperative was chosen because of the basic meanings that the Laboratory would like to convey with that term. The Educational Cooperative should not be a super structure imposed over existing school systems. It should, instead, emerge as a creation of them. The Laboratory staff is of the opinion that the Educational Cooperative eventually can become an official organizational unit of operation. This will become the responsibility of state legislatures and state and local school officials, however.

The mission of the Appalachia Educational Laboratory is to provide the leadership, action, and resources required to develop, diffuse, and institutionalize a network of Educational Cooperatives that will make quality education accessible to the youth of Appalachia. Much assistance is needed from inside and outside

the region to achieve this goal. A high degree of cooperation will be required among local school systems, state departments of education, and colleges and universities. A very systematic approach, from development through installation, will also be required.

The Laboratory proposes to develop the Educational Cooperative by using the relevant standard steps currently employed by the professions and by industry. The design of operational requirements and specifications for the model cooperative will be based upon technical literature, research, and information currently available. Field activities that will explore and assess concepts and operations that can be incorporated in the design of a subsystem of the model cooperative will be undertaken. Contracted services will be extensively used.

At this stage, the Laboratory views the cooperative as the system (as used in Systems Management) with seven subsystems. The subsystems, with brief definitions, are as follows:

1. *Management subsystem.* Will consist of the tasks which must be performed in order to plan, coordinate, execute, and evaluate the operation of the Educational Cooperative.
2. *Media subsystem.* Will cover the adaption of educational television, radio, telephonic facilities, computers, and other media and technology to services of the cooperative.
3. *Personnel subsystems.* Will consist of the human performance necessary to operate, maintain, support, and control the Educational Cooperative system.
4. *Data management and quality control subsystem.* Will provide for integrated, efficient data generation and processing for all subsystems.
5. *Mobile facilities subsystem.* Will provide for the movement of facilities such as equipment and personnel (professional, technical, and pupil), and such units as clinics, workshops, and laboratories. Special packages of materials and devices that can be moved from school to school in support of a particular area of instruction will be included.
6. *Central facilities subsystem.* Will consist of the nucleus of buildings, studios, offices, and related physical facilities from which the Educational Cooperative will be managed and from which most of its services will emanate.
7. *Content subsystem.* Will consist of all instructional and

supporting services to be offered through the cooperative system such as instruction in a subject matter field, guidance services, inservice training, etc. The perfection of this subsystem, of course, is the ultimate goal of the cooperative.

Following this rather organizational description of the Educational Cooperative, two examples of educational innovations will be cited as examples that could be created through the plan. One will deal with early childhood education, which is receiving increased emphasis. The other would introduce a greatly needed reorganization of the high school curriculum.

As the first example, West Virginia is nearing the time when she will institute public kindergartens. Most educators expect that this will occur not later than the session of the General Assembly in 1969. Virginia is prepared to initiate public kindergartens in September of 1968. Tennessee, Kentucky, and other states who do not provide public kindergartens are in about the same stage of thinking as West Virginia.

Generally speaking, these plans call for the establishment of conventional kindergartens for five-year old children. The tragedy is that this is the mode of thought when experience and recent research and evaluation already have proved the conventional kindergarten obsolete, especially for severely deprived children. Also, if West Virginia, for example, approves the public kindergarten as presently proposed, an increase of at least 10 per cent in the number of teachers will be required. West Virginia and other states similarly situated cannot get a sufficient number of certified teachers to staff existing 1-12 programs. It would be safe to say that there are not twenty-five teachers with basic and special preparation in early childhood education in any one of these states. An increase of at least 10 per cent in school buildings and facilities would be required. We are not meeting our building and facility needs for existing programs. It might also be significant to ask how we would add kindergartens to one-, two-, and three-teacher elementary schools and what the probable quality of such programs would be.

Transportation services would have to be increased substantially if rural youngsters were kept in classes for only a half day. Some discount the significance of this problem by reference to the fact that we don't expect youngsters from remote areas to participate very much anyway. This attitude represents an important neglect within itself.

As a quick conclusion, it would be estimated that even if the state of West Virginia appropriates sufficient supporting funds, it will take 10 years of struggling to institute a conventional kindergarten program. And it will be a program that is mediocre and already obsolete.

Quickly, let's explore the possibility of instituting early childhood education through the Educational Cooperative concept. Imagine the setup as previously described functioning completely and furnishing early childhood education into homes. ETV would be used to the maximum, radio would be used judiciously, mobile facilities would be used for the distribution of books and materials and to provide firsthand experiences in art, drama, et cetera. If, in addition to this, some home visitations were built in, say through OEO headstart resources, additional strength could be added to the program. Expertly trained teachers could be afforded for the basic instruction. Programs could be planned and presented in accordance with the best that is known about learning and behavior. Children at the critical ages of two, three, and four could be reached also, and the parents could be involved. Such an approach, if sound and feasible, could be institutionalized in three years. Such a program could advance a state in early childhood education within 20 years.

A second proposal will be outlined which would involve a major alteration in the high school curriculum through the practical use of televised instruction. We begin with the realization that televised instruction, for the most part, has been limited to teaching established courses in a conventional way, except that the instruction has been transmitted via television. Secondly, in order to project the theory, we recognize that the large high school is proliferated with courses. We boast of 75 to 80 courses in what we often call a *good* high school. And then we realize that we expect the high school youngster to acquire high school training by taking 16 to 20 of these courses, based upon the familiar Carnegie unit. The theory for breaking through this maze of courses through more effective utilization of televised instruction is proposed as follows:

1. Reorganize the total high school curriculum into some five or six major threads or strands of learning—math, science, social studies, language, the arts, etc.—with no course delineations. Eliminate duplications and merge such closely related content as American history and American literature, etc.

2. Employ at least one master teacher for each major area of instruction at a salary of \$15,000-\$20,000 to teach the strands in one continuous sequence, emphasizing major concepts and principles in each area.
3. Transmit the instruction into TV receiving rooms where students view it with only a monitor present and select and maintain their level and sequence of instruction from the multiple levels of transmissions.
4. Use the regular classroom teacher to provide individualized instruction, direct independent study, etc., from guides and materials that follow and supplement the televised instruction, thus permitting every child to advance at his individual rate of learning.

Imagine what this could do for instruction in small, poorly equipped, and inadequately staffed high schools. Think what it would do to help the student to work his way through the maze of 75 to 80 high school courses, forced to select 16 to 20 of them for his high school education. Consider how far superior students could advance in four years and how well individualized instruction could be tailored to slower students. Such a program can be created. This type of program for today's high school could be effected only through a plan of operation as conceived for the Educational Cooperative.

These last two references were included to return our attention to the substance of the Educational Cooperative as distinct from its organizational form. Another administrative organization is important only insofar as it will enhance access to quality education. It can hardly be expected that another organizational pattern alone will greatly improve education. No other one previously installed has accomplished this task.

The Educational Cooperative as an organization device should be given secondary consideration when compared to the educational practices which should give substance to it. I would re-emphasize that it is not an organization to be imposed. It should emerge from the cooperative efforts of local school system practices to increase their capabilities to provide quality education.

The cooperative should not be considered a new system of practices added to existing educational practices. It should be developed as a new system of integrated practices embracing all that can be done best by the individual teacher and school capitalizing upon new developments in technology. The proposal is

to use specialization when it is needed and to adapt practices to needs and to capabilities. It abandons many of the age-old beliefs in education—that teachers can be all things, that a well-prepared teacher can be furnished for every classroom, or even that we can prepare teachers fully capable of serving today's educational needs in the existing pattern of education practices. The Educational Cooperative abandons the idea that classrooms, schools, or even school systems can be self-contained or self-sufficient. It is aimed at increasing and utilizing the power and potential required for producing and providing access to quality education for all. Thank you.

Dr. Cameron: Thank you, Dr. Carmichael.

PANEL DISCUSSION

Dr. Cameron: We are ready for questions and comments from the panel. Joan.

Joan: Dr. Carmichael, I did not fully understand what you meant when you said that the high school student could not get a good public education in regard to courses. It has always been my opinion that it is not the courses that prevent the student from improving himself academically, it's largely dependent on the teachers.

Dr. Carmichael: Well, I think there is a great deal of truth in what you say, but let me be more specific. There is no doubt that the experience provided to the high school youngster by individual teachers is tremendously important. I would not think for a moment of abolishing that. In fact, I think that I would propose a greater opportunity for it.

Let me take this as an example: As a person or two in this audience with whom I have worked closely for the last five or six years knows, I have often talked with high school principals and high school teachers about what would be an adequate program in social studies, let's say, since we have at least two of you here with a strong interest in the field. As we begin naming courses, a good high school that offers a lot of courses will name about 9 in the field of social studies. How many of those courses do students take? We reflect, I am sorry to say, usually upon the alert, academic students—those who are trying to prepare themselves for college—who take about 3 units in math, about 3 in the sci-

ences, 4 in English, and so on. Quickly you take that individual and you think about him and say: Well, he takes civics, he's got to take that; and he takes American History, he's got to take that; and that's about all he takes. You just examine your groups of students, those in this particular category. You find a lot of others taking sociology because they heard it was easy and they get caught somewhere and take that one-half unit of economics.

What I am trying to say is that this is a tremendously important area and I cannot believe it is possible in the present high schools to provide youngsters with the kind of exposure to knowledge that we have available today. We keep our courses as 9 separate ones, and we find that the youngster who really makes the greatest effort taking courses come up with only a couple of them. Where do you get the time? When do you get to that course in economics? How do you get to that course in European History? Most youngsters don't.

Dr. Cameron: Joan, do you want to respond to his answer?

Joan: I agree with some things he said, but I don't fully agree. I still think that even though there are some courses a student might not take full advantage of, a student who strives hard enough will get the best out of his high school years.

Dr. Cameron: Mrs. Hawkins, who is a social studies teacher, perhaps will give some light on the point that you have just raised, Joan.

Mrs. Hawkins: No, I am not going to give an enlightenment. I'm going to ask a question. In all of this discussion I have listened carefully and heard references made to expert teachers and specialized teachers. In my opinion, one of the basic reasons for all the experiments to which we have been subjected through the years (and I have been teaching more years than it looks like I have been) is that the classroom teacher is the final answer. What happens between the classroom teacher and her students is the final basic answer to education. Nowhere have I heard anything about preparing teachers for new experiments. We have been subjected to progressive education, to team teaching, to all kinds of new fads and things that you suggest to us. But where do you get the value system for effective teaching?

All the academic training, all the propaganda, all the inservice training, have been given merely to more academic training. Where in all of these devices in the complex which Dr. Leu

spoke about, in the cooperative teaching, do you transmit the teaching-learning values of the democratic system, the values crucial to the process of education? Where do teachers get the training to transmit the teacher-student values? T-V doesn't do it, the mechanical devices don't do it, and the whole educational system falls down. The master minds, who are directing the chaos and disruption of our school society, have liberal arts academic training. They have the wrong set of values for teaching. Where does the value system enter into these new schemes, is what I would like to ask.

Dr. Cameron: You may be the only classroom teacher here but you have a lot of friends. Are there other classroom teachers in the audience, incidentally? You are not alone. Don Leu is going to answer that from a university's viewpoint and then maybe Ben Carmichael would be interested in answering it from experience that his laboratory has had in inservice training for teachers.

Dr. Leu: I'm not going to attempt to answer the question. It is unanswerable, but I think your point is well taken and I would like to respond in this way. You look at all the technological changes that we are talking about, including educational parks, computers, electronic aids, and the like. I think they have a very valuable role in the area of facts and information. You can do a better job of making available to students facts and information from electronic gadgetry and thereby free the teacher to work at a higher level of teaching-learning relationship which has to do with knowledge, judgment, values, and wisdom. Now, the unfortunate thing, and I'm not damning the teachers because we are equally guilty, in those places where we have used electronics aids, i.e., study carrels that have a code book and stored retrieval systems, and have moved teachers into the class-seminar situation where individual students are doing research and freeing the teacher to work with a small group in a consultant role, many teachers can't work that way. You all know this. So there's a tremendous need for an inservice or reservice training program.

I'm very much concerned about your question because we have been on the science kick, we're on the technological kick, we're on the complex kick, we're on the large mass kick, and we had better get on the human kick real quick. This means that we have to go through a whole program of retraining and contin-

uous training for our teachers. I wouldn't damn the parks or electronics, because they can do only certain things which are relatively unimportant, but they thereby free teachers to do some of the more important things.

Mrs. Hawkins: Dr. Leu, there is just one other question I would like to ask. In this complex to which you refer in the park school, particularly with underprivileged children, the homeroom teacher probably is the only person in their entire lives with whom they have any empathy, and the only person who is trained to understand their personal problems. I can foresee my failure when I do not know the background of these children, and when I do not have personal contact with the families. Now this will be lost, although I think this is very vital to effective teaching. However well academically I may be trained, if I can't teach this child because I am unaware of what his needs are, will this capability be lost in this complex?

Dr. Leu: Probably, by pool planning. It should be one of its purposes. Again, I will come back to this complex animal called the park. If you're having a lecture, a lecture is nothing more than programmed learning. A textbook is programmed learning. A lecture can be given to 150 as well as it can be given to 30—the standard classroom. So all of these purposes of these new electronic gadgets and parks and so on are to differentiate between programmed materials which can be done better by other instruments in the inquiry method of learning. Under the inquiry method, or the discovery method of learning, you've got to free your teachers to work with smaller groups. Moving to a park isn't going to get you that, but it does make it possible, as does moving to any other electronic thing.

We made a research study of some 300 high schools throughout the United States who were quite innovative, and one of the things we looked at was the teacher-pupil relationship in small groups and counseling. The thing we discovered is that, in the places that had moved to large group instruction in order to free teachers to work with students on an individual and personal basis, in the small group areas where this was supposed to be happening, the teachers were still lecturing. Now, again, I am not being critical. That isn't their fault. It's our fault. We really haven't had the planning to show them the other relationship and the other opportunity. We just can't assume that they have it.

Dr. Cameron: Mr. Hancock.

Mr. Hancock: I would like to respond, Dr. Leu, by saying that we probably should carry this one step further. You mentioned in your talk that one of the dangers of the complex, the educational park, would be the creation of a bureaucracy. Would we not have teachers who still have the human desire to succeed, to have close relationship with their peer group, who still need the human element of a thank-you? We may become rather heretic in our organization to the point where we would not be able to expect teachers to get close to children because actually no one is close to them. I know that we may be assuming that in a profession we should not have this characteristic, but I doubt seriously if we can assume this with a great deal of validity. I think teachers at least indicate that there must be approval. Now, if this thing develops so hugely that this approval can't come to teachers, can we expect it to be transmitted to students? I think it is essential that it is, but is this not a danger?

Mr. Randalls: I'd like to comment concerning this whole session this morning. First, I think we need to go back and ask ourselves these questions: "What is the philosophy of our community? Do we want the traditional encyclopedia teacher or teaching? Do we want the teaching that issues forth information. Or do we want the inquiry discovery approach by which the child is able to understand the concept regardless of the amount of information that is being issued forth today, so that he can help solve the problem?" Once we have defined the community's philosophy, we need leadership that is willing to stand up and fight for this—not tomorrow but today. We take a look and say, "Well, I think we need to take a new look at what we are doing." But we need to take a look at our leadership and say to ourselves, "Do we have people who are willing to fight for this change that's needed?"

I cannot possibly believe that we can develop an educational complex or a school system without having support from the leaders. Principals cannot do it. Teachers cannot do it. The administrators in a school cannot do it. We must have people who are willing to stand up and support us when we receive criticism. Once we define our philosophy, then we may be ready or able to develop our educational park complex. I am firmly against the park complex that has 5,000 students in one building, and we call

that a school. I do not call that a school. I think that is just a large mass of students who completely lose their identity.

I am for schools within a school. I think it goes back to your philosophy. It's a wonderful opportunity if, let's say, we purchased two or three hundred acres of land and we had six schools on this plot of land. There is school Alpha, Beta, etc. We could call it Pearl High School, Stratford High School, and Hillsboro High School. But each of these schools is a school within a school. The child is a member of one of these schools. He is not a member of this giant 5,000 student complex. He really is, but he has his identity as an individual student.

Each individual school has a staff. Let's say, for example, we have seven language arts teachers within one of these schools. Children in this school receive instruction from those seven language art teachers. The beauty of this is that maybe in School B across the path, there is a tremendous teacher in language arts who has a gift for Shakespeare. We can utilize that teacher over in our school; yet maintain our identity as an individual school. Over here, we have a nice science complex where we can expose students to people who have the ability to lead children into discovering information for themselves. I feel we need to take a look at the direction we are going, not losing the identity of the individual school, but yet making it possible for children in a certain area to have an opportunity to have advanced physics, Greek, or just any subject you would like to name—have this opportunity but yet maintain their individual feeling for their individual school.

Dr. Cameron: Thank you for your comment. Do either of you want to respond to Mr. Hancock's question? Joe, we haven't heard from you this morning.

Joe: I am concerned about a small child who is forced into one of these schools with a large student body where he doesn't acquire the confidence that he might in a smaller school. I understand the teacher may not be able to handle this problem the same way. I would like to ask Dr. Leu about that.

Dr. Leu: I've never been able to learn very much with my mouth open. I'd rather listen particularly to what the kids have to say. You've put your finger on a very serious problem in educational parks. In fact, in all the whole direction of American education right now, we are increasing mental illness by our large, imper-

sonal, complex, electronic, demanding educational system. Most of us who are critical of today's generation floated through high school. Now we don't like to admit this to these kids. I don't know about you but I hardly cracked a book. The point is that there are tremendous demands and pressures on today's youth and, on top of that, we are putting them in these large, complex organizations and we are increasing mental illness in American public education. Therefore, we have to turn around and redesign the human element that the teacher was talking about, and the physical environment to decentralize, to humanize, and to personalize. I've been in some elementary schools of only 600 that are horrible places for kids. They are impersonal factories; so I'm saying the number game itself isn't enough. You are correct in your concern.

Mrs. Hawkins: I'd like to ask a question. One of the things that has been bothering me ever since I have been teaching is the dichotomy of what we practice and what we preach. For example, we say every child is valued as an individual. I had one education course in which you were taught to take the child where you find him and take him as far as he can go. Sometimes, my problem is finding him wherever he is. Then you say we must take care of individual differences, yet we throw them all into the same classes, expose them to the same instruction, and give them the same tests. This bothers me because it isn't considering individual differences. This is what worries me about these new complexes. Speaking of tests, nobody has been tested more than my children. We have discovered everything that is wrong with them but nothing about what to do for them.

Dr. Carmichael: I would like to respond to that briefly. I think the point is well taken, but it's an indictment against the existing structure and operation of education. If you have been associated with a good solid program of nongraded instruction and team teaching which strive to get at the question of individual differences and if you will pursue the program far enough, genuinely carrying it out, somewhere along the line you will conclude that it is manually impossible to maintain the kinds of records and data that are needed to answer the kinds of questions that you are talking about. It requires some kind of data management and processing if you are to get it. If you take a group of junior high school youngsters, truly teach them where they

are, keep an adequate record of where they are developing, and get at the core of it, it is humanly impossible to keep these kinds of data. You would have a department like that of Texas. You've got to find a way to collect and store data in order to know where you are. Teaching is not that simple and it's been one of the biggest mistakes of all education.

As one of my assistant superintendents used to say when people talked about knowing all about education, "Well, after all, everyone has either been to school or knows someone who has." Education isn't that simple. It's more complex than practicing medicine or law and we can't keep smoothing over it—hitting it with a shotgun blast. We've got to zero in on the information when we are talking about what youngsters are, what we can do for them, and the like. I contend that you can't do it without adequate data processing, storage, retrieval systems, etc. I think the question is good. I would propose that such a solution is the kind of thing that should answer some of the questions we are talking about.

Mike: In my examination of the situation, it seems that actually we have two problems. I would like for the gentlemen to discuss them. First of all, in our country today we have a great amount of complacency, whether we like to admit it or not. One reason for this complacency is that we have not instilled a great amount of initiative in our people. Initiative is instilled through competition. In high schools today, we have our initiative instilled in us by competition in athletics, by competition in forensics, and in activities like these. When you put a lot of people in one central high school and eliminate the others you are going to destroy this sense of competition because they will have no one to compete with. So this is the first thing. It is going to make more people complacent.

Secondly, we have had consistent recommendations today about putting kindergarten, grammar schools, junior highs, and high schools all on one plot of land. Here in Davidson County, our board of education has come to the conclusion that the 6-6 system will not work and now we are going to the 6-3-3. The reason for this concern is the fact that when you put students who are 12 years old with students 18 years old, even though you keep them divided, they are still going to look at the older ones for influence and guidance. Sometimes this influence and guidance is not what it is supposed to be. We come out with situa-

tions like 13 year-old girls going steady, at 14 they are engaged, and at 15 they are married. A situation like this might contribute greatly to hastening a student's maturity more than if he were in a system where students were separated by age groups.

Mr. Hancock: I think that was a good comment. Joe made a comment earlier. We were talking about the competitive factor. Perhaps he would like to respond a little more along the lines of your thinking.

Joe: Being involved on an athletic team, I know at Hillsboro there is a certain pride that we take in competing against certain teams around the area. This does not mean that we are not friends with these people. Sometimes they are our best friends, but if we were brought into one centrally located building and we lost the sense of competition, as we got older we never would have experienced this competition. I think this would be a mistake. Every person doesn't have to participate in athletics, or forensics, or some other activity, but without this competition we lose a characteristic of ourselves that we all need to experience. I think it would be a mistake.

Mr. Hancock: This pride factor was the one thing I wanted him to mention again. We see this all over the nation and it seems that it is very prevalent here in our discussion. Everyone seriously needs some kind of pride in something that is good and wholesome.

Dr. Cameron: Dr. Carmichael indicated that a reorganization was needed. Dr. Leu certainly pointed this out. I would like to suggest that the areas that were mentioned by Dr. Carmichael were all academic, but a great deal of attention has been given to a lot of technological changes which have a connotation for technical and vocational education. As we plan these institutes we, as people who in the past 10 or 12 years have put a great deal of emphasis and much money into academic training, must remember that technical and vocational training is just as important. We face a statistic that says that approximately 80 per cent of the jobs available in this nation do not require a college education. Certainly those who need to go to college must go and we would encourage them. But so many of our entry occupations do not require this. I think we must emphasize the need for technical

and vocational education to be included in our planning. I hope you don't mind my making this observation because it seems to me to affect far more boys and girls than will be affected by the strictly academic planning. I hope this is to be included, Dr. Leu, in the park concept even though it wasn't specifically mentioned.

Joan: I have one final question for Dr. Leu. I was wondering if in grouping students in this one complex, you would use the traditional method of testing to group the students or would you have to devise a new method?

Dr. Leu: There is no one answer. Generally speaking, with my bias and prejudice, I would not academically group them, because then you are back into segregated education, segregated wholly on the basis of academic talent. I think I would group them in a variety of ways, but I would not group them merely on the basis of the bright kids in one group and the dumb kids in another.

Mr. Hancock: Dr. Cameron, I would like to make this comment to this distinguished audience. As I understand it, as a member of the panel, there are a number of states represented here—legislators, superintendents, and school board members. Mr. Bailey mentioned that this was a unique day's work. I think it even more unique that the leadership of your group has asked principals, teachers, and students to respond to a concept that is largely in its planning stage. I have attended a lot of meetings, but I do not recall having attended a meeting at which time the people who are actually students in the schools and the people who are actually on the firing line have had an opportunity to respond to an idea that is really a new idea. I think this is quite unique and I hope I can speak for the panel in saying that we appreciate the opportunity to respond to this vast question.

Dr. Cameron: Thank you. We will now adjourn for lunch.

LUNCHEON
Municipal Auditorium
Presiding: Dr. John L. Cameron
Speaker: Dr. David K. Berlo, College of Communication Arts,
Michigan State University, East Lansing, Michigan

A HAVEN AGAINST DISASTER

David K. Berlo

Dr. Cameron: We are privileged to have with us today as our luncheon speaker another member of the faculty from Michigan State University, Dr. David Berlo. He is a professor and chairman of the Department of Communications at Michigan State, and is author of *Communication Within the University*, *The Process of Communication*, *International Communication and Economic Development*, and film series on *Management and Communication*. He serves also as consultant to the Internal Revenue Service, the Office of Civil Defense, the National Council of Churches, and other groups. It is a pleasure to have him address us on the topic, "A Haven Against Disaster." Dr. Berlo.

Dr. Berlo: Thank you, Dr. Cameron. I had a problem which I thought was unique to me in that I wasn't sure why I was here. The laughter you hear comes from the gentlemen I have been asking why they were here. I find that the problem is not unique to me at all, because many of us are here as we are for most conferences—because here is where the airplane landed. One gentleman said last night, "Well, I came because they paid my expenses and, after all, if you are going to stamp out ignorance, someone has to buy the shoes." This is a phrase I intend to take with me.

Then, too, I was confused as to why I was here because this seems to be a thriving organization with a socially acceptable purpose and some public respect. I am not used to that in the organizations with which I usually work. I have been known around the country as a consultant for lost causes. Dr. Cameron has mentioned some of them. If you think you have a hard job, you should try mine. For the last four or five years it has been my job to try to improve the taxpayer relations of the Internal Revenue Service, to help the National Council of Churches, to work in foreign aid, to educate people as to the desirability of

public and private fallout shelters, to work with the National Safety Council, and to institute a program of birth control in Catholic countries in South America. So it is indeed a pleasure to be with people who don't mind telling people what they do for a living.

I have been asked to address myself to the question of the school as a haven against disaster. Actually, I take some exception to the title because to me the notion of haven implies peace and rest and solitude, and some place where one runs to escape from the pressures that exist within our society. In my opinion, these are the last functions that should be served by a school. A school, like a church, should not be a haven but should be the center of disruption. It should be the major innovated institution, and should often, if not always, be exciting but seldom peaceful. Fortunately, the way the students are rising lately, my hopes of an exciting place within education are soon to be realized whether we tend to share these values or not.

I would like to spend these few minutes talking about some of the things that I think, as a communication scientist, we need to take a look at with respect to the school—particularly, since I am here as a representative of the sponsor. In fact, I said to Jack early this morning that I am not used to being the commercial in an otherwise nonprofit date, but I have been asked to touch very lightly, and lightly I shall, on the question of the utilization of a school as a shelter protection device for both natural and nuclear disaster.

First, I would like to talk about something that I know something about. It seems clear to me that the school and educational institutions in general are becoming the major stable social units within the interculturation process in our society. The role of the family is obviously changing, the hold of the family on the youngster is rapidly lessening—I will not use the word deteriorating but lessening. The role of the church is increasingly a responder to its client rather than a leader of its client. The major preservation of our values as well as the major unit for the introduction of change becomes that increasingly life-long institution known as the school. To me, the biggest single purpose in education today is to produce in our client a readiness for change, a tolerance for uncertainty, a desire for ambiguity, and an eagerness and willingness to live in situations which are not internally consistent, in which conflict is the order of the day, and in which

the sole proposition of which we can be confident is that the skills which we have acquired to meet the needs of society will be out of date while we are still in the process of acquiring them. This to me is the main purpose of planning within the institution.

As I said to some gentlemen this morning, plan carefully in order to reduce error. But I tend to be a negative thinker. I am much more interested in planning in order to facilitate the kinds of errors we want to make rather than planning to facilitate the kinds of errors we don't want to make. As those of you who were trained in science know, the question isn't just whether you are going to be right but, when you are wrong, what kind of wrong do you want to be? To me, this notion of planning for selective errors is the basic principle of educational planning. If there is one thing we know for sure, in the planning of the educational system over the next 30 years, it is that the social needs for which we are erecting human and physical facilities today will be radically different 30 years from now, and will be equally different from what we expect them to be in 30 years. Namely, most of the things which we are doing today in the planning of our educational system are wrong—inevitably wrong and inherently wrong.

A key question for a planner is, "What kinds of errors can I protect myself against in the sense of building my structures sufficiently and ambiguously, so that they can be used for purposes quite different from the purposes for which they are intended?" This seems to me to be a basic notion that we need to take a look at, both in our physical construction and certainly in our curricular construction. Yet, I am concerned that in the educational establishment of the United States—certainly in higher education and secondary education, and to a lesser extent in elementary education—I do not see the kind of research that is needed in anticipating and planning for these kinds of educational errors.

If we look in the private sector of our society, we find a very high correlation between the profitability of an organization and the proportion of its revenues which it allocates to research and development. I am continually amazed that our institutions of higher education compose the largest industry in the United States which allocates practically nothing to research on product development and to research on improving the quality and effectiveness of what we are doing with our product. In educational systems, particularly in secondary and higher levels, what is

going on in the concept of the classroom and what is going on in the communication processes between learner and teacher is still best predicted by what went on prior to the invention of the printing press.

I recall the time I was in Vietnam where I saw a teacher standing in her classroom reading the text aloud to her students. I was very discouraged at this lack of use of communication, so I asked afterwards, "Why are you doing that?" The answer I was given was a very good one: "This is the only copy of this text in all Vietnam, and therefore if I do not read it they cannot be exposed to it." This I accepted as a good answer, but was appalled when I returned to East Lansing and walked into my colleagues' classrooms and found that they, too, were reading the text to their students; or, if they were somewhat more sophisticated, they were reporting their memorized reading of the text; or, if they were extremely sophisticated, they were reading from a text other than the text which had been assigned to the students. In this case, the students could never detect that there were two texts in the course—one being read by the teacher and the other being read by the student. Teachers are still teaching as if the book had not been invented.

Actually, I am very happy the book was invented as early as it was, or we would have a new unit within the university. As you know, for every new medium of communication invented we have an academic department for it within three years. We now have departments of television, departments of radio, departments of visual aid, and so on. I am convinced that, if the book were to be invented today, within five years every major university would have a "Department of Books," and every student in education would be required to take some work in book appreciation as part of their training to be teachers. Nevertheless, we are still using the classroom as an oral tape recorder in large part. When we do go to the media we do not use them very intelligently, partly because of the lack of training of our teachers and partly because of the complete inadequacy of our facilities.

I am in print in an article which says "Research has conclusively proven." I seldom use that phrase. If you are trying to do the wrong kinds of things in education you don't do them any worse over television than you did them before in the classroom. I think that summarizes the majority of the research which has been done on the utilization of television in American education.

I also point out that we are arranging our technology in the schools in which we have made a significant innovation. We have replaced the teacher in the classroom with a picture of a teacher in a classroom and argue that this has improved the quality of education. Part of this is because we as educators tend to be, on the basis of our research in innovation and diffusion, one of the most resistant of all social institutions to innovation and change. I think an appalling indictment of this, as educators and guardians of national change, is that our own institutions are more recalcitrant, more bureaucratic, more inhibited, and less likely to move rapidly with innovation and change than most other institutions. I recall when I went to Michigan State University some 12 years ago, I asked to be told what the philosophy of the university was. The gentleman who did it at that time—Paul Miller, now with the Office of Education—said: "There are three things that describe Michigan State University: First, we do many things right and many things wrong, both with equal speed; second, John Hanner presides over an empire on which the concrete never sets; and third, you can try an idea here and have it discarded because it didn't work faster than you could get it through the curriculum committee at any other major institution." I find those activities in my university lessening as we become more mature, and in so doing the excitement of the institution is passing.

Because of this need for innovation, for trying, for alteration and change, for the building of ambiguity, I particularly urge you in your planning and in your construction to come to grips, not with what your media people tell you—because they are not up to date—but with what is available in the free-enterprise sector and what is available in the government sector. We can begin to build our schools for communication transaction and for dialogue involving technology. We can take into account today, for instance, the fantastic innovations just over the horizon in the bill on public television. We can come to grips with what satellite communication in this country will mean to the availability of various kinds of communication strategy within the institution. We can take into account the fact that, technologically, the receiver is about to be much more in charge of what he receives over his television set than the producer will be. We are moving to options where any given channel will be wide enough so that a receiver may select messages or portions of messages which he

finds desirable, eliminating any other messages which the sponsor or client may have in mind. These kinds of technological devices need to be built in so that we will begin to look at the educational situation as a communication situation.

Technologically, it is again feasible to strengthen the notion of education's being a log with a proverbial teacher and student at each end. Yet so much of what we are doing in our design of people as well as in our design of hardware is making it impossible to utilize that technology or to anticipate the role of technology in the future.

I am also disturbed about the communication area, having been involved with another cause that unfortunately still is a lost cause, that of civil rights. We are about to be on a collision with class warfare in the urban centers of our society. I am concerned that we don't understand, and find it hard to appreciate the kinds of values that are operating in Newark, Detroit, Chicago, and even the small towns like Grand Rapids. We do not understand what is going on. We are treating lower and lower-middle class youngsters with the same kind of culture-bound values with which we treat our teachers. We use ridiculous terms like "Negro leadership," a term for which there is no reference in any urban community today.

We are not coming to grips in our facilities with the kinds of surrogate functions for the family, and surrogate functions for other aspects of the community which the schools must assume if we are to break the kinds of chains that are occurring in the inner-cities. The question is not whether education has the responsibility to do this. That question is one which only the affluent can afford to ask. The question is whether there is any alternative but for education to assume the responsibility for many of these innovations in our society. Much of what I have been referring to is: (1) lack of understanding of communication and education as a change of orientation, (2) lack of understanding of the role of product development in our business, (3) lack of understanding of the use of technology, and (4) lack of understanding of our client.

I am amazed at how many people are pleased and surprised that we have the clients and participants in our process as part of the program and how unusual it is for us in education to include our clients as part of our policy-making discussions. Many of the problems discussed have a basic fallacy and misassumption about

the nature of communication and what we are about. For the most part, the basic communication problem stems from the fact that most of us, because of our training, operate under the assumption that meaning or content is in textbooks, that education is involved with content, words, textbooks, pictures, and activities. We fail to realize that there is no meaning in work, there is no meaning in any event, there is nothing significant in and of itself other than how it is interpreted by the human observer, and that meanings, therefore, reside in people, and the purpose of communication is not to cover material or to transact content. The purpose of communication is to get effect. The whole nature of the system needs to be laid against the criterion of what effect can we expect to improve if we take this option versus that option.

Let me give you an example or two of what I mean by a lack of understanding of communication as involving effect instead of content. Many of you have participated in staff meetings of one kind or another. Have you ever been in a staff meeting where there were five items on the agenda, the meeting was called for 4:00 p.m. on Thursday? We always have staff meetings because it is Thursday—that's why we have them. The chairman goes through the first item and a healthy discussion begins to go on within the group. It's 4:30 and we are still on the first item, and at 4:45 we are still on the first item. Finally, the chairman blows the whistle and says, "I am sorry, gentlemen, we can't continue with this discussion now, even though you seem to be highly involved in it, because if we continue with this point we will not be able to —." What's the answer he gives? "We won't be able to cover the agenda and leave at the appointed hour." It becomes quite obvious that whenever you deal with a supervisor in this role he is sick as far as communication is concerned. He thinks that the purpose of the staff meeting is to cover the agenda.

We do the same thing in our classrooms, don't we? We organize information in 50-minute chunks, three times a week for 16 weeks, twice a year. Fortunately, we have teachers trained to write textbooks to the schedule so we have 16-chapter texts for these 16-weeks courses. Have you ever been in a class where the first week you got involved in the first chapter, the second week you got involved in the second chapter and the class got turned on, the third week you were in the second chapter, and the fourth week you were in the second chapter? The kids were

really learning and the teacher blew the whistle and said: "I am sorry, ladies and gentlemen, I know we are having an interesting time here but we must move on because if we stay here any longer we won't be able to —." To do what? "We won't be able to cover the material." The teacher is sick. She or he believes that the purpose of education is to cover the material.

The purpose of the staff meeting is to complete the agenda. The purpose of a conference is to find enough things to do so we can sit placidly between 9:00 a.m. and 5:00 p.m. so we can go on to the cocktails we came for in the first place. What is training for? To cover the material. Why do we have staff meetings? Because it's Thursday. Why do we build buildings this way? Because we do it this way. These are the kinds of general communication inhibitors to which I refer. I am always disturbed about this, because I think the main purpose of education is to produce a tolerance for change; yet, in my opinion, the main effect for education is to produce an intolerance for change.

I am continually confused when I run around with four, five, and six year old kids who are curious about everything, inquire about everything, are probabilists in the way they look at the universe, understand such theory easily and intuitively, understand probabilist statistics easily and intuitively. Then I don't see them again until I get them in graduate school where they ask no questions, are interested in nothing, write down whatever they are told, even if it is obviously a false statement of fact, and are completely incapable of looking at anything in a probabilistic sense. For example, I was once in a class with a teacher who, when the instructor was giving various philosophies of education, raised her hand and said, "I am terribly sorry, Professor McMurray, but we are school teachers during the year, we're only here for the summer, and we don't have much time. Please don't give us all these alternative philosophies. Just give us the correct ones so we can go back to work."

The problem that this stems from, I think, is that we are essentially using our educational facilities to produce a disciplinary relationship—a strait jacket and social relationship rather than an innovative relationship. I remember the story my granddaddy used to tell me on the farm about the fellow who was selling John Deere tractors. He drove down the road and saw this old farmer plowing with a bull in front of a plow. He said, "I think I can sell a tractor to this fellow." So he went up to him

and said, "Pardon me, sir, I am with John Deere. I notice you are plowing with that bull. I'd like to sell you a tractor." The farmer said, "I'm sorry, son, I don't need a tractor, I've got a tractor up in the barn. In fact, I've got two tractors up in the barn." The fellow said, "Well, they must be in a bad state of repair if you've got those tractors up there and you are plowing like this." The old farmer said, "No, there's nothing wrong with my tractors. They are in fine shape." The John Deere salesman was quite confused and he said, "Look, I know I am not going to make a sale here but I wish you would explain to me. If you've got two perfectly good tractors up in the barn, why are you plowing down here with this bull?" The farmer said, "It's a matter of discipline. This bull's gotta learn that there's more to life than jumping cows and jumping fences."

I sometimes think that much of what we do in the name of educational planning and certainly much of what we do in the case of educational transaction are primarily based on the assumption that the main thing we are about is not efficiency or effectiveness but just teaching our youngsters that there is something else in life besides jumping cows and jumping fences. Now, when we look at how we communicate and why we communicate, even in situations like this today, we realize that the major purpose of human communication is to make yourself feel good. The major purpose in conferences such as this is to go back home and say "Hell, we're not so bad off, there's three times as much trouble in West Virginia," or "They're way behind us in Florida," or "I talk to my students so that I feel good when I am through."

One of the hardest things I have to get across when I am training teachers is that there is a difference between teaching and talking. The conscientious teacher knows that he is paid to teach. When he gets in the classroom, if he is not talking the whole period he feels guilty—that he is not earning his pay. I find an interesting relationship, for instance, between how satisfied the teacher is at the end of the class hour and how excited the students are at the end of the class hour. They are negatively related. The teacher is excited when it has been a formal situation where everything has gone according to the prearranged battle plan, when the game did not have to be altered in any way to take account of any changes in behavior on the part of the student and when the final peroration hit at exactly 49 minutes and 30 seconds, allowing the usual 30 seconds for ques-

tions in the class while the kids think through what the teacher had been studying for 15 years.

The teacher finds herself disorganized when the students take charge of the classroom. The teacher feels guilty and doesn't feel very good, but the kids are learning like hell in this kind of situation. But it doesn't look good. It doesn't look good to the teacher. It doesn't look good to the supervisor. It doesn't look good to the evaluator coming in. So we communicate to feel good.

I also notice, and I've noticed it here this morning that one of the main purposes of communication is to avoid giving information. We communicate with our subordinates carefully. We make sure that we run the meetings in such a way that we'll never get in situations where we have to talk about things we are not prepared to talk about. We communicate with our wives in such ways that when we leave in the morning she knows no more than she knew when we came home the night before. We communicate simply to feel good. We need somebody else there because it's still socially unacceptable to talk out loud unless there's somebody else in the room, and we communicate in order to avoid giving information.

The same thing, in my opinion, applies to much of the work which we have done in looking at the general concept of safety in our school and in particular the question to which civil defense has addressed itself to for these last several years on the need for shelter and increasing shelter responsibility within the society. Let me make my position clear. I do not think the provision of shelter space is an educational responsibility. I do not think it is the educational responsibility of any school system to take charge of protection of the people against disaster in that community. I do not think it's an educational responsibility. I think it's irrelevant that it is not an educational responsibility.

The educational responsibility question is another example of communicating to feel good, of making sure that we can allocate our problems among other appropriate units of government and civic control so that we can be restricted to the good questions, namely those questions which are easy to solve and which have public support. The facts of the matter are that if we do not utilize educational facilities as potential bases for public shelter there shall be no other facility to replace them. If it makes us as educators feel better that we have not abdicated our responsi-

bility as an after-conclusion in the event of natural or nuclear disaster, then so be it. I for one find this to be an inadequate justification. And yet we find that, as most innovations exist, there has been little innovation of the shelter notion within public or private education, or for that matter, within much of any other kind of public facility.

We find, for instance, that the school is still defined as the central unit of safety, as the central unit of comfortability, as second only to the home in the social satisfaction which children and their female parents have in time of disaster. We find from public opinion research that somewhere between 84 and 92 per cent, depending on which study you want to look at, of all adult Americans believe strongly and favorably in the notion of fallout shelters and in the notion of shelter protection. It is the overwhelmingly favored position of the American public. We also know that almost all Americans are in favor of such a concept and practically none of them intends to do anything about it, as is true of so many other things.

My recommendation several years ago to the Office of Civil Defense was to forget about trying to educate the public to the need for shelter protection in the case of nuclear radiation and attack because there are no meanings in the public for the kinds of situations which would exist under these conditions. Therefore, it is impossible to communicate through any public vehicle the kind of situations and the coping with behaviors which are possible in such a situation. It has to be done through responsible bureaucracies which have at their disposal the decision-making processes which, in large part, can bypass public involvement in public decision-making. Again, the school system tends to be one such kind of bureaucracy.

We know that the public accepts overwhelmingly the idea of having shelters. We know that the female adult population and the youth population accept overwhelmingly, next to the home, the value of the school and the educational facility as a social haven in time of disaster. We also know in the last six months that the public is responding overwhelmingly, in state after state where it is being attempted, to the government's desire to have individuals produce an analysis of their own home, particularly their own basement, in terms of the kinds of protection factors which are involved. In my years of experience as a social scientist I have never seen results like the ones that have come up in

Rhode Island, Nebraska, West Virginia, Wisconsin, and Minnesota, and shortly in Michigan and other states where between 85 and 90 per cent of all individual householders in the state has responded to a mailed questionnaire in which they have done the work to give the government the information it requested on the kind of protection they had in their home. Thus, there is public willingness to at least attend to the question, there is public favorability to respond to the question, there is public ignorance as to what the question is, and there is public apathy as to doing anything about it.

Within this frame I in no sense urge anyone in this room to incorporate a particular, or for that matter, any kind of shelter protection within your own school buildings. That is a decision which I am professionally incompetent to make and which I do not deem to be any of my business.

I do urge you in this—as in several of the other points which I have tried to suggest—to make sure that the decisions that you make as to educational planning and construction are not made until after answering questions such as “What is the classroom for?” “What is the role of technology?” and “What can meaningfully be done with respect to safety?” Until those questions have been answered I urge you not to close your plans on educational construction and educational planning. In doing this in all of these areas, of which I consider the shelter one to be only a part, I urge you to take into account the kinds of openness of communication that do not exist today among principals and teachers, and boards of education and administrators.

I have become fairly active in my own state in educational politics in the last year. And I am shocked, that today in our state—just 17 days before the opening of school—almost 30 per cent of our school districts and almost 70 per cent of our kids are still not covered by contracts for the coming year. This situation is due much more to a communication breakdown than it is to any ideological differences between the teachers and the administration. The public is ignorant and not consulted on most of these issues at any time. There is a communication problem which needs to be taken into account, particularly in the area of the safety notion, both with some major conflict that may occur or some trigger-happy smaller power that may unleash nuclear devices, or the natural disasters that this year has shown are with us and can be within any one of our 50 states, or the kinds of in-

dustrial problems that are inevitably going to arise in the next 30 to 40 years when protection against certain kinds of errors is imperative. In my opinion, the protection against the error of not having filled the vacuum of protecting the safety of the dominant proportion of our young population is a crucial one for us to consider.

I leave you with the general remark, not only in the safety area but in general, that we need to open the communication channel within the educational establishment. During the last year, I participated in the development of a document which we have now produced at my university called "academic freedom for students." It is not a perfect document but it was a very educational experience. It allowed people who neither trusted each other nor recognized the existence or relevance of the other's position—in fact, it forced them—to enter into communications together. So in doing communication, if we are to avoid the notion of communicating just to feel good, or to communicate to avoid giving information, we must open the communication channel. Thank you.

Dr. Cameron: Thank you, Dr. Berlo. We will recess until 2:00 o'clock, at which time we will meet back here this afternoon.

AFTERNOON SESSION

Program Moderator: Dr. John L. Cameron

Speakers:

Dr. Joseph F. X. McCarthy, Assistant to Superintendent of Schools for Educational Parks, New York, New York

Dr. John W. Gilliland, Director, School Planning Laboratory, University of Tennessee, Knoxville, Tennessee

Panel:

Dr. Donald J. Leu

Dr. Benjamin E. Carmichael

Dr. Joseph F. X. McCarthy

Dr. Charles D. Gibson, Chief, Bureau of School Planning, State Department of Education, Sacramento, California

Mr. Philip A. Stedfast, Director, Department of City Planning, Norfolk, Virginia

Dr. Charles E. Trotter, Jr., Chief, Design Section, Office of Construction Service, U. S. Office of Education, Washington, D. C.

Mr. Harold Chapnick, New York City Schools, New York, New York

Mr. Thomas H. Murray, New York City Schools, New York, New York

EDUCATIONAL PARKS IN NEW YORK CITY

Joseph F. X. McCarthy

Dr. Cameron: In May of this year the metropolitan school facilities planning group held its annual meeting in Atlanta in connection with the Great Cities Research Council. One session of the program was devoted to educational parks. Mr. Gene Holt of New York City—now the Commissioner of Public Works, but at that time in charge of school construction for the New York City Board of Education—arranged for Dr. Joseph F. X. McCarthy, an assistant superintendent from the New York system, to come to Atlanta to describe the work he had been doing in planning educational parks for the city of New York. Those of us who were privileged to hear him, to see his visuals, and to examine some of the materials he has with him for this occasion, were very much

impressed. Joe McCarthy has served as a teacher and principal. He has taught at the secondary vocational level as well as in higher education, and is the author of a number of publications. It is my privilege to recognize Dr. Joseph F. X. McCarthy.

Dr. McCarthy: Thank you very much, Dr. Cameron. I hate to hear introductions because I know that I am not going to live up to the expectations people might have as a result of them, and especially when what I am going to give might not come off as well as I would like for it to.

I am starting today under a series of disadvantages. I had planned to start by explaining to you that I had traveled a very long distance to get to Nashville. Well, that line has been taken by Dr. Leu. Then, I thought I might establish some kind of rapport with the southern ladies and gentlemen here. My wife, very much unlike Dr. Berlo's description, is never satisfied with communications that are not complete and detailed. By the way, I would like to take a course out in Michigan State University to find out how you can give a midwestern wife ambiguous answers and get away with it. I have been trying it for 20 years without the slightest success. At any rate, we went over it and she pointed out that my sister-in-law Bobbie comes from Oklahoma. That might help. It might, but then the folks here from Oklahoma might know her and it wouldn't help to know my relatives. I could also point out that I was once an honorary citizen of Fort Worth, Texas. However, I would have to explain how I got to be an honorary citizen of Fort Worth, Texas, and that would involve an air force reserve session at which everybody was an honorary citizen of Fort Worth who passed out before the Fort Worth mayor who was there and. . . . It was a lot of fun really, while it lasted.

I labored a little longer and I said, "Well, we're going down to the Great Smokies and New York City is about to take over that title because of all the air pollution and our skyscrapers and I might say that I am from the Great Smokies." But, after all that horror, I found that the perfect introduction was provided by Dr. Leu who stated that the public schools were driving their inmates crazy. I am here as one of the inmates to show you how crazy one can get.

I did prepare a manuscript, and I will follow most of it this afternoon. I hope you will pardon me if from time to time I duplicate material that was covered earlier. I am not going to

dwell upon the general picture of educational parks. I am going to try to give the background as it affected New York City because I believe strongly that the local background for any idea is essential to an understanding of how the local community, whether that community be Nashville, New York City, Los Angeles, or anywhere else, works out the details of its plan.

At the start I would like to emphasize that I did not come to Nashville to indoctrinate anyone or to tell you how to run an educational park in your city or town. I am extremely flattered by the invitation to give a picture of what New York has done so far, and also to derive from comments and questions and discussions some ideas that I can take back to New York with me and act real original when Dr. Donovan asks me what I have been doing this summer.

In one sense at least, educational parks are not a new idea in New York or any other city with a major university. University campus planning includes a number of separate units, gathered around a common center, unified in some forms of general administration, but quite definitely separate in function. We in New York have a long record of university campus building—and rebuilding—on which we can call for some elements of experience in "park" work. It's not especially fashionable to consider the university campus as an educational park, but there seems no special reason to be fashionable when it's worthwhile pointing up a real source of experience.

In another sense, there are several educational parks operating in New York City today. This connotation of the term suggests that it is an educational "park" if one finds several schools closely adjoining each other: it depends on a definition of "park" that would rely chiefly on geographical location, and would consider proximity the chief mark of a park. While I would immediately reject that as a criterion for educational parks, there are several locations in the city of New York where several good sized schools are in very close proximity. In fact, there is one stretch of territory in the Bronx where one will find a large elementary school (PS 86), a large girls' high school (Walton), a college campus (Hunter), a nationally known specialized high school (Bronx High School of Science), and a very large boys' high school (De Witt Clinton). Approximately 20,000 students are in session at that site at any one time, but there is very little school-to-school contact, and by ordinary standards, there is no educational park on that site.

The expression "educational park" and discussion of the idea in New York City is of comparatively recent origin. To the best of my knowledge, it was mentioned only briefly in public comments in the early 1960's, and it is quite possible for first-rate graduate students in education today to be at a loss to explain the concept. The expression first came to prominence as an aspect of the controversies surrounding the city's integration policies, and it was advanced as a kind of panacea for the integration problem of the city of New York, among other major cities. In the mid-60's, the idea gained a great deal of prominence.

The integration aspect of the educational park idea was often espoused or attacked without much more idea of what the "park" might be than the fact that it would include a large number of pupils. From the point of view of making integration possible, of course, large pupil populations seem to be essential, for with a large enough population, one may draw on diverse neighborhoods. Some who supported "parks" did so simply because they thought of them as very large schools, in which integrated pupil populations would be more likely. Some who opposed "parks" did so simply because they feared the consequences of having simply very large schools.

With this controversial background, a conference was held at Arden House, New York—attended not merely by New York City educators, but by many university scholars and outside practitioners—to discuss the educational park idea. The results of this conference were edited by Nathan Jacobson and published in 1964 as a booklet that went out-of-print almost at once because of an unprecedented demand. This more or less professional treatment of the idea was followed by a guide for public discussion.

The public discussion guide was prepared by staff members of the Board of Education, chiefly by Jacob Landers, then in charge of the Office of Integration, and by Adrian Blumenfeld, administrator of the Office of School Planning and Research. It was intended to outline the possible advantages of educational parks, and it made one very interesting contribution in the form of distinguishing three "types" of education park: the horizontal, which would include a number of school organizations of the same school level, such as junior high schools; the vertical, which would include one school of each school level; and the pyramid, which would include one senior high school organization and all

its feeder units. This discussion guide was widely distributed among parent groups, and was used in a number of parent meetings devoted to the park concept.

Educational Park Planning Activities

Against this background of discussion and professional level study, the Board of Education took its first steps toward actual planning of educational parks. The 1965-66 capital budget included—among its dozens of projects—planning for two educational parks, both to be located in the northern portions of the city. One of these was designated for a school site already being planned for the John F. Kennedy High School. A rather long rectangle, this site is intended to include the high school at one end, plus two intermediate schools at the other end. Since planning for the high school had already proceeded quite far, it was decided that the high school plan would continue intact, with adjustments to be made in the intermediate school plans to accomplish park status.

The other site selected for an educational park had no previous school development under way, and provided a clear instance of a situation in which an educational park plan might be tested in full. In past years, a massive tract of land in the extreme northeastern part of the Bronx had been occupied by an entertainment site known as Freedomland. Some of you who visited the World Fair in New York may have passed this site, just east of the New England Thoroughway about a mile inside the Bronx-Westchester County line. For a number of reasons, this amusement park venture failed, and the land was eventually secured by an organization known as United Housing Foundation.

U.H.F. plans to erect the world's largest cooperative apartment project on this site: eventually a population of 55,000 is expected in a series of buildings which will be known as Co-op City. Twenty-six acres of the plot were reserved for public school purposes, and it was determined that the public school organizations on this plot would be organized as an educational park. It was likewise determined, in the light of other school population requirements, that the schools at the Freedomland site would include space for children from other parts of the Bronx, especially at the intermediate school and high school levels.

At about the same time, the New York City Board of Education undertook a careful study of a 4-4-4 organization. It was

thought wise to include this type of organizational division at the park, and to utilize the opportunity given in building the park to include maximum opportunity to innovate not merely in organization, but in other aspects of education as well.

So in 1966, a request was made to the U.S.O.E. for Title III funds to support a planning activity, intended to plan the schools for the proposed educational park on the Freedomland site, the park we now designate as Northeast Bronx Education Park. This grant was received, and I was designated as project coordinator for the planning operation, which began in June 1966. As principal consultants, two outstanding educational planners were secured, both currently on the faculty of the City University: Drs. Cyril G. Sargent and Louis Rosasco. Additional consultants were brought in for certain aspects of the work, and the staff of the city school system was actively involved in preparing position statements or presenting ideas for inclusion in the park plan.

Much of my remaining presentation will deal with the Northeast Bronx Education Park project, but I would like at this point to indicate two other aspects of educational park planning currently under way in the city. The first has been handled by an extension of the original Title III grant, and was brought about as a result of a proposal that New York join Philadelphia and Baltimore in a study of the educational park idea on an intensive basis. The New York share in this joint project came about because of a taxpayer action brought by certain civil rights leaders in Brooklyn. These individuals requested, and got, from the New York State Commissioner of Education, an order staying construction of a number of public schools in and near the Brownsville-Canarsie sections of Brooklyn. The complaint alleged that these individual schools would be segregated because of the neighborhoods in which they were to be built, and it requested the Commissioner to order the construction of an educational park instead of the separate schools. They proposed a site for this proposed park, one which had been in question for many months before the board discontinued its studies on the grounds that the site would be developed as an industrial center. A consultant firm was engaged, Corde Corporation, to analyze the proposed park site and organization.

In its memorandum on the proposed park, Corde Corporation found reason rather to recommend that the schools in question be incorporated into a new Linear City, proposed by the Mayor's of-

fice to develop a section of East Flatbush in Brooklyn. The Linear City proposal envisions extensive use of air rights over the Long Island Railroad, the development of highway and feeder commuter lines, homes in apartment houses, social agencies, and public buildings along this "spine" in Brooklyn. The educational aspects of this proposal is envisioned as being an educational organization connected through the "spine" with two anchors: Brooklyn College at the westerly end, and a new technical institute to be planned for the easterly end in the Brownsville vicinity. The school units would be built as part of the Linear City project, connected by transportation media and other means. This new development from the educational park idea is, as you may imagine, currently under intensive and continuing study.

In addition, the New York school system is studying other locations in the city where educational park type organizations might be proposed. Several suggestions have been made and are under consideration, but no other definite park plans have been decided on. It is likely that communities interested in the development of a park in their neighborhoods will offer further suggestions, as it is likely that areas that oppose parks will continue to make their views felt.

The Northeast Bronx Education Park

The Northeast Bronx Education Park is the first educational park to be planned from the start as such in New York. It is intended to serve 10,400 pupils on a single site, embracing grades from pre-kindergarten through high school. Associated with it, but on a separate site, will be an additional 1,400 pupils in a primary school organization. Just from the point of view of numbers, then, this is a considerable undertaking. Let us for practical purposes ignore the proposed additional primary school. (It will be located to serve a section of the development and adjoining homes about one mile from the main site, separated by two major parkways from the educational park site.)

According to our population estimates, the park will draw about two-thirds of its population from the Co-op City apartment units, and about one-third from other Bronx locations. Included in these is a predominantly Negro neighborhood of private homes, and a new low-cost public housing project. The exact boundaries of any zone to be served by the educational park will not be drawn until the park is ready for operation, but it is ex-

pected that these two adjoining areas at least will be important parts of the feeding zone. Our expectation is that the student population of the park will be about one-third "minority group" and two-thirds "others," for a balance that appears viable and desirable from the viewpoint of integration—which is one of the major purposes of the park idea, and certainly in the New York City context the first reason, chronologically, for starting a park in the first place.

The site provided for the park is by no means large, covering only 26 acres; by the standards you gentlemen usually apply, this is a tiny site. By New York City standards, where we are extremely tight for land, this is about the same land that we would have been allotted for five separate schools, if we were to house our pupils in separate organizations. The 10,400 pupils were originally scheduled to be organized as follows: one comprehensive high school of 4,000 pupils, two intermediate schools of 1,800 pupils each, and two primary schools of 1,400 pupils each.

Our planning section decided to view the 10,400 pupils as making up one new organization, an "educational park," rather than as five separate school organizations. Thus, we were able to consider the entire pupil population as being served by some facilities, while individual school level operating units would serve the pupils separately within the park.

Our solution to the problem of massive size (and 10,400 is indeed a massive size school) was to adapt the "school within a school" idea to the situation by creating a number of sub-schools at each of the operating levels. There was precedent for this in the recommended organization of New York's standard 1,800 pupil intermediate school, and the concept was strongly recommended by our consultants. As a result, we have broken down the population into 12 "units,"—four at each school level. Each resulting unit is fairly representative of the size of a respectable school in most parts of the country. These units, then, will include 700 primary school pupils, 900 intermediate school pupils, and 1,000 high school pupils. This yields the curious result that within the proposed educational park, pupils will be assigned to "units" that are substantially smaller than conventional schools in the New York City system, while having what we conceive to be great advantages in equipment, services, and educational programs that are attainable only with large size.

It might be of interest to indicate what our recommendation is

regarding the integration of pupils at each school level. The figures indicate that there will be an influx of children into the intermediate and comprehensive high school units who were not in park units at the next lower level. We propose that each "class" of children moving from primary or intermediate school be divided in fourths and evenly distributed among the units of intermediate or high school level, so that not only will they meet larger numbers of fellow students, but there will be a minimum risk of clannishness interfering with the harmonious integration of newcomers at each school level.

We conceive of these operating "units" as the scene of the principal learning activities of the pupils. Within the unit, we have called for lunch and library, guidance, and basic classroom learnings. It is likely that the primary school pupil will spend nearly all his day within the unit; while at the high school level, it is expected that the pupil will pursue specialized work outside the unit in central facilities for perhaps half or a little more than half his day by the time he is a senior.

The concept of "central facilities" placed additional requirements on the architect of the park. We propose to include many facilities that are not commonly available in any one school in central positions on the park site, where they may be shared by all units. We propose, too, to cut down on the space allotted to some services in every school, because such services or facilities may well be shared by several units. Hence, we expect to be able to have one major auditorium to serve the entire park, rather than the five auditoria that would be provided in separate schools; one somewhat larger medical suite can serve the 10,400 pupils instead of five separate medical suites. This does not eliminate several aid stations, of course. We propose to include museum space and a little theater, facilities not often encountered in separate buildings, and a "physical environment observation center" to include earth science laboratories, growing areas for living things, a weather station planetarium, and central science lecture hall—all for use by children from all school levels.

The educational program proposed for the park is still quite open-ended, but we are certain of several items at this point. For one, we are including provisions for clusters of classrooms at the primary and intermediate levels, surrounding instructional resource rooms, as the basic element of room organization. As we conceive it, there will be two clusters of four classroom spaces

each around each "resource center" in the primary school. This makes available the space requirements we envision for any of the following types of instruction:

1. Separate classrooms with some common lessons
2. Complete team-organized instruction
3. Alternate small and large group instruction
4. Nongraded organization
5. Departmentalized instruction

Considering the need for teacher-training in our schools, we have incorporated observation spaces in each school level, for use with practice teachers or with beginning regular staff members. The park specifications emphasize heavily the need for flexible space, with a great deal of emphasis on seminar-sized rooms and spaces in which large groups of pupils may be brought together for parts of their instruction. We expect the latter to be accomplished through use of the "resource centers," through folding or operable walls between classrooms (conceivably through non-walled classrooms), and through advanced media including electronic and televised instruction.

The great emphasis on community sharing in educational plans, and on community use of school facilities, as well as our recognition of a need for parent education, has brought about the inclusion of requirements for parent education rooms in each primary school unit, and of some rooms for community use through the school day. As with all New York school organizations, we expect the educational park to conduct an extensive afternoon, evening, and summer program for its community. It is expected that a community and parent council will not only operate in connection with the park, but that space for this purpose will be included to enable us to have a community school in architecture as well as in purpose.

I would like to point to just one or two other aspects of our plan in brief before summarizing. First, to our library proposals—in one sense, at least, the educational heart of the schools. In addition to the "resource centers" which will be learning centers for the use of library type materials as well as instructional areas, each operating unit will have its own library space, sufficient to handle 10 per cent of its assigned pupil strength. The primary school units, however, will share library-type reading rooms. In addition, an instructional materials center is provided,

to house the stacks and rarely used materials, the union catalog, the faculty and parent libraries, and the control center for the electronic and television instructional program.

Second, I would like to dwell a little on the aspects of the park plan that should lead to improved course offerings and instruction at the park. These, as I see them, include the following:

- More varied course offerings can be included than in any one separate school, for the pupil base to whom the course may be offered will be far broader. We expect that in some instances pupils of different school level will work together on studies (for instance in some music, art, or language activities) or remedial work. To cite foreign languages as an instance, it seems likely that the size of the park will warrant offering languages rarely offered elsewhere in the schools.
- The availability of specialized equipment should lead to better instruction and better learning than we can manage in conventional settings, or when we depend on excursions to expose children to such things as an art studio, a museum, or a planetarium.
- The presence of all three levels on one site, sharing one set of facilities, and organized as a new unit should lead to vastly improved articulation of instruction, to better services to teachers, and therefore to better instruction. Especially in subject areas like industrial arts, home economics, music, and art, we look for improved supervision of instruction and improved servicing to teachers in terms of materials and exchange of experience.
- The presence of four equivalent "units" at each school level should lead to major advantages in educational research, curriculum development work, methodology, and vertical study of pupils. If the concept of "control" groups means anything, and I am convinced it has its value in educational research, we have a built-in system of control groups for educational research. The great need for continuous study of pupils through their entire public school careers suggests still another instructional value our park should achieve.

A final aspect of our planning embraces professional personnel

matters, and on this we have still a considerable amount of work to do. One of our consultants, Dr. Anthony Baratta, has submitted a proposed statement of the requirements for the job of "unit head" within the educational park, suggesting that these individuals, whom he views as roughly equivalent to building principals in other contexts, would be the key persons in making and improving the program of the park. We have had a number of studies underway with the heads of our system's subject directorates, about the possible use of common departments, whether vertical or horizontal, in some subject areas. Basically, the personnel area has opened up many questions, and so far has answered few about the operation of the park.

Architectural Proposals

A brief review of schemes offered to solve the park problem architecturally indicates the following:

- The essential importance of access by pupils, public, and service vehicles and individuals, through safe and separated traffic lanes
- The importance placed on achieving a recognizable separate "unit" personality through architectural treatment
- The placement and distribution of central facilities so that there are, in effect, "zones" consisting of:
 1. Service areas
 2. Jointly used facilities for the same school level
 3. Facilities jointly used by more than one level
 4. Facilities with strong public interest and participation
- Conservation of open areas and play zones for children of primary schools and athletic fields for other children.

(Scheme for solution of the architectural problem will be presented visually. It must be emphasized that this is still a tentative solution; the scheme presented has not been fully approved or even fully developed as yet.)

A total price tag cannot yet be placed on this educational park package, so the argument about "economy" is still largely a hypothetical one. There seems no question whatever that one can achieve a certain saving by constructing five schools at the same time, cutting out all overlapping facilities, and operating on a high utilization factor. There seems, too, little question that one

can get an acceptably high utilization factor for many less-used facilities in an educational park, and therefore include them in a park building package, even though one cannot include them in any one constituent school. To return to our starting point, New York City has a very high cutoff point for the inclusion of facilities: our city expects very high utilization of its school spaces, and has traditionally had a dim view of spaces that cannot be used extensively. Our experience, tentative though it is, does not indicate a cash saving, because we are including facilities that individual schools would not ordinarily have. Our studies do indicate that a cash saving could be had if we simply duplicated existing school programs for the park. It appears to me, however, that we will be offering the New York City taxpayer a much bigger educational package for the money expended.

This, then, is the picture of Educational Parks in New York City at the moment. There are two parks definitely included in the Board of Education's capital budget. In one, the high school has already been planned, and additional units are being planned now. In the Northeast Bronx Education Park, we have a plan prepared from the start as an educational park, now undergoing architectural study. In both, our objectives can be summarized quite simply: to achieve integrated pupil populations in a situation designed to produce maximum community involvement, educational innovation, and educational services. I am convinced that these objectives can be approached, and that the educational park is one extremely hopeful avenue toward the achievement of urban education of the highest quality. Thank you.

PANEL DISCUSSION

Dr. Cameron: We've had the presentation of the developments of educational parks in New York City as of this date, and we have two New Yorkers who will serve as panelists. Both are members of the teacher corps, and both have worked with the "school house in the city" exhibit during the summer and will stay with it through its visit in Chicago. On my right, wearing the gold coat, is Harold Chapnick; and on the far left is Tom Murray. Tom also has a gold jacket but he was afraid it would put Dr. McCarthy a little more at ease if he wore one that wasn't quite so loud. Which one of you wants to lead off? Harold?

Mr. Chapnick: This isn't the usual reaction I have to a class of

children. I want to add my voice to the lady that spoke this morning. I'm another school teacher, and as such I feel like one of few that are here. As a school teacher in New York City, Dr. McCarthy, I am subjected daily to the hostility of many community groups. As I listened to your very interesting presentation about the building of an educational park, I wondered how the building of that park in the Northeast Bronx or in the Riverdale Section of the Bronx is going to help New York City solve many of its community problems. How are we involving community groups in the planning of these facilities?

Dr. McCarthy: That's very good question and my answer to it probably will be unsatisfactory. We've involved the existing Northeast Bronx community in the planning of the Northeast Bronx Educational Park. The way we've attempted to do this is through the existing local school board in the area and through existing community associations. I emphasize *existing* because most of the clientele that we expect do not at the present time live anywhere near the Northeast Bronx Park site. We don't know who they are, we don't know who they will be. The point at which we attempted to involve them was as early as a year ago last June. This project began June 1, and by June 15 we had feelers out in the community and we had a series of meetings at which individuals and groups within that particular existing Northeast Bronx community made many suggestions.

Some of these suggestions are already in the program. Some of them were things that would depend on the operation of the program. For example, the Boy Scouts organization had a number of suggestions that they wanted considered but did not really concern the building itself. I think one of the items that is worth mentioning in this particular context is that we are providing, for the first time, spaces within the school building within the educational park which are labeled as full-time 24 hour-a-day community spaces. We are hopeful that the City Planning Commission and the City Budget Commission will approve this allocation, but we are providing a substantial area within the educational park where adult members of the community will be encouraged to take part in operation of the park's activity.

We are also hopeful that those sub-school units which I described will each have its own parent group. The reason for this is simple. If your youngster is going to a school that has 10,400 pupils it's much less likely that you are going to show up for a

parent activity than if your kid were going to a school of 700 where a kind of family feeling is possible. We are also proposing a community council which should represent the community which this park will serve when the community is known and when it's in existence. Sorry it has to be that kind of a weasel answer, but that's the way it has to be.

Mr. Murray: Dr. McCarthy, we are presently in a teacher corps training program. We are connected with the University and we find that some very exciting research is coming from sociologists and psychologists in the University. Much of this is directed toward teacher training. I would like to know what kind of cooperation has taken place between the educational park planners and the educational research specialists in the universities around New York City.

Dr. McCarthy: We've had official connection with the City University on this particular point. We have had one official and personal connection with Fordham University because I am on their faculty. The official communication and contact has had positive results in terms of space allocations. Again, I am talking in terms of the space we are providing. In the form of observation rooms at each of the school levels in which student teachers are beginning permanent members of the faculties may have an opportunity to observe children or other teachers at work. We are also on that level providing teacher workrooms with facilities for the development of materials that the teacher would ordinarily have to bootleg into an odd room or shop or something of that sort. Now, as the park takes shape it is expected that one of the teacher-training institutions will have an affiliation contract with the city for the training of student-teachers and the training of intern-teachers at the educational park site, but as they said, this project is still a couple of years away from breaking water and the affiliation contract has not yet been signed.

Mr. Chapnick: One of the greatest difficulties we have in New York City is the bureaucracy which is represented at 110 Livingston Street. There has been a problem in terms of communication between line staff and the staff at the Board of Education. When I look at the diagram showing the bureaucratic structure of the educational park I kind of cringe and say to myself: Here is another structure being set up, how will this be different?

Dr. McCarthy: I want it very clearly understood that my office is

at 141 Livingston Street not 110, and therefore I am eliminated from this bureaucracy that Harold is referring to. This morning, if you remember, Dr. Leu mentioned one of the probable advantages of an educational park would be the decentralization in a major city of a substantial amount of the overhead. We expect that when the park is in operation it will bypass a substantial amount of the existing overhead. The curriculum operation at the park site, for example, will probably report directly to the park administrator, the superintendent of schools, not through the various divisional offices. We expect also to have on the park site a single supply center which will approximate a supply warehouse which should render the educational park independent of the service of supply at least in terms of commuting back and forth to get the supplies.

I think some percentages might be of interest to the group here. In New York City we have approximately a million students at the present time. This educational park that we are talking about today will represent about 1 per cent of the total school population of the city. Ten thousand four hundred children represent the pupil population of many substantial self-respecting school districts, doesn't it? That's a lot more than many other self-respecting school districts have, and it is extremely likely that when the educational park is set up—assuming that the administrative relationship which we outlined here is accepted—it will be functioning, I won't say independently but I would say autonomously within the city.

Mr. Murray: Since this is my final question I'd like to give some deference to another established group that has very little to say about what happens in the school. I think too frequently teachers are expected to go into an environment which they have had very little to do in creating and they are expected to achieve certain things in that environment. What has been done to find out what kind of environment the teachers in New York City feel will be best in achieving the goals of the New York City school system?

Dr. McCarthy: In terms of a formal channel of communication between the educational park planning office and the teachers' union there is none. There has been no official relationship with the teachers' bargaining agency. However, in the list of consultants, if you would look at that, you would see a substantial num-

ber of classroom teachers listed as individuals whom we called on.

FORUM DISCUSSION

Dr. Cameron: Charles Gibson is Chief of the Bureau of School Planning, State Department of Education in Sacramento, California. Charlie has long been a leader in the educational facilities field. He has served with John Hamil and me as members of the I.E.S. Committee on School and College Lighting for a number of years. That standard, incidentally, is under study for possible revision sponsored jointly by the A.I.A., the National Council on Schoolhouse Construction, and the Illuminating Engineering Society. Charlie has recently addressed the International Union of Architects in Prague. I just returned from that meeting a few days ago. He also is serving this year as president of the Association of State Directors of School Facilities Planning which will have its annual meeting in Detroit in October.

Another member of the panel is Mr. Philip A. Stedfast, Director of the Department of City Planning in Norfolk, Virginia. Mr. Stedfast also serves as Executive Secretary to the Norfolk City Planning Commission and Executive Secretary of the Norfolk Fine Arts Committee. He went to undergraduate school at Dartmouth, but he learned better at that point and got his master's degree in city planning at the University of North Carolina. Aren't there any North Carolinians here who are going to cheer with that. Good! Dartmouth, of course, is a fine college too. It has wonderful skiing I understand.

We also have on the panel a member of the staff of the Division of Facilities Development, Office of Construction in the Office of Education, Dr. Charles E. Trotter, a native of Tennessee. He served as teacher-principal in Tennessee and was assistant director for the school planning lab over at the University of Tennessee. At the present time he is chief of the design section in our office.

We want to give a lot of opportunity to the audience here. Philip, I thought that we'd start in the order in which the members of our panel are listed, and first give Charlie Gibson an opportunity to either ask a question of one of the presenters or to make a comment in connection with the subject of the day. Charlie.

Dr. Gibson: Thank you very much, John. Frankly, I came here

to find out what the educational park is, and I am still trying to find out. Really, semantically it's a myth, and I suppose it then can become all things to all people. I share Don Leu's attitude, however, that anything may be better than what we are doing in many respects, and I do know that progress in education only comes out of a crisis. So, if we look at this whole problem of the educational park, it has come out of two crises—the integration crisis and the urban renewal crisis. The thing that disturbs me, however, is that no one has approached this problem, to my knowledge, from an educational point of view. Since it is basically an educational problem, it would be refreshing to hear this discussed frankly and strictly as an educational matter.

There is a lot of interest in what's going on in West Virginia with the lab concept that was explained to us here this morning. I think a lot of good will come out of a program of that nature. I will follow it with interest. John, I'm not going to make any more comments, I'd rather talk about what people would like to hear rather than what I'd like to say. As Leu says, I don't learn very much while my mouth is open.

Dr. Cameron: You may not have learned what an educational park is but you've learned one good lesson today, haven't you?

Dr. Gibson: Yes I have.

Dr. Cameron: We'll turn now to Philip Stedfast.

Mr. Stedfast: I had hoped that I would be able to claim the distinction of having come the farthest distance. I find though that I am just down the road. Perhaps having started a trip at 4:00 o'clock this morning might entitle me to some kind of special consideration.

As a city planner, I've been impressed with the program considerations which have been discussed, the varying concepts of educational parks. I mentioned to Dr. Leu that I was also glad to hear someone not throw the city out the window—to indicate there is hope for the central city. You may be assured that the physical planners, my counterparts in the cities across this country, are anxious to work with you, the educators, who must in fact determine the program needs for our young children. We can help only in assisting you with locational considerations, with transportation considerations, with population studies, and I would hope that when you sit down to talk about educational

parks in your community that one of the first people you call and ask to be present is your city planner. I think he can add much, I know you can add much, and maybe we can open the line of communication which has also been referred to today.

Dr. Cameron: A lot of people have been wondering who Charles Trotter is. They have had so many communications from you and they have not heard from you since the meeting got underway this morning. Now is the chance to get yourself known, Charlie.

Dr. Trotter: This has been a very interesting day for me. As Dr. Gibson said, I have learned more about the concept of what educational parks may or may not mean and I am not real sure that I understand yet. I have enjoyed hearing the speakers and I think they have done an excellent job. I do have some questions in my mind. I don't know whether I am supposed to raise questions or not, Mr. Moderator, but I believe I will raise one. In the school planning lab at the University of Tennessee, we put a great deal of emphasis on planning a building around the curriculum that it is to serve. Here we are talking about buildings; and again, as Dr. Gibson said, we haven't discussed education at all. We haven't discussed curriculum. We haven't mentioned what kind of curriculum, what kind of education, what's going to happen to the kids in this educational plaza that we are talking about. We are planning the plaza and then we are going to fit the kids and the people into it. I just wonder if maybe I have a misconception here, or if someone who has been in the business of planning plazas would like to say something about this.

Dr. Cameron: I think probably Joe McCarthy would be the logical one to answer that. Joe, have you taken the kids into account in your planning?

Dr. McCarthy: I think kids are great. Every school should have some. Seriously, I know that as I answered one of the previous questions I said that the teachers' role in the planning would be much more significant when we were working primarily on the curricular implementation side. However, this should not be taken to suggest that the educational parks are planned in terms of buildings alone. One of the facts of life in our city is that there is a curriculum bureau and that it has made certain specific requirements. Every school must conform to these require-

ments. In planning the educational park, therefore, this was a springboard, a minimum expectation beyond which everything else was gravy, and anything else that was involved was the provision of considerable facilities which would be suitable for a variety of curricula purposes.

One of the comments at the break concerned the structural walls etc., because one of the somewhat fixed features of life today is the idea that classroom spaces should be quite flexible. It should be possible to change from a self-contained classroom appearance to a large group area or a series of smaller group areas. This we have tried to do. A good deal was said earlier today about the electronic revolution and the possible impact it might have on the future. Not knowing precisely what direction this impact would take, what influence it would really be, we compromised by specifying the following: that every instructional space in the educational park should be accessible, reached by TV cable for pickup and for reception, and an empty conduit built in—empty conduit into which telephone lines could be put, additional electric power lines could be put, and, conceivably, gas or air power lines could be put. Now, in specifying this we are not yet in the position to play God. I don't think we ever will be.

One of the biggest problems that I think exists in our schools, and I may be completely wrong about this, is the fact that they were built for a program and not for the possibility of several programs or different programs. The typical school today, the elementary school for example, has been built for the self-contained classroom situation. If you are willing to accept this as the ultimate in education we have no problem, we've got egg crates. In requesting designs for new school facilities in the park we have not spelled out precisely the ways in which these facilities will be used, but rather have specified ways which they *may* be used. I hope this doesn't sound too much like hedging, but really this is what it is. We are trying to make a reasonable hedge against the future and at the same time a base on which we in New York must function, which are the existing curricula requirements. These are there, but beyond these we have incorporated a very large number of alternate possibilities. Thank you.

Dr. Cameron: Thank you. Dr. Carmichael, would you like to query one of the other speakers or another member of the panel?

Dr. Carmichael: I'm not sure it would be a query. It perhaps would be an attempt to continue reaction to this very vital question which was asked in regard to curriculum planning. I think, if it were a question to other members of the panel and if it were a question to the participants in this conference, that I would keep attempting to remind you to emphasize the look that I think we have to take of reality. In the concepts that I attempted to present this morning I'd be very clear and precise with you that this is our best notion of how to do something about education which is vitally lacking in the classrooms of American schools today because of the particular structure in which we are operating.

We've gone through some real mental gymnastics in trying to analyze what you do in the area that I would refer to as content, here meaning really that curriculum and instruction are all the experiences that can be provided children. There are those who believe there is no use to begin thinking about hardware today because we don't have software to put through such a system as I have discussed. But, if you really will go to classrooms, if you really will observe children and teachers in relation to each other throughout the day, there is one definite conclusion that you can draw: that there is a better curriculum today, there are better materials, and there is better software than the means we are using to provide them to children.

I could describe reading programs for you from grades one through eight, or mathematics in terms of the processes that are used in teaching. We really are not teaching in accordance even with handbooks which are prepared with materials. We've got a definite professional block. My contention is that we really are not serving American children with the kinds of curriculum, the kinds of material, or the kinds of software that are now available for teaching.

I think our big job is that of finding how to get the job done in a reasonable, practical way. It won't wait. The problem has mounted to the point where we can't possibly overtake it by training master teachers and getting everything in shape to carry on the same old kind of instruction that we have declared will work. We are caught up in the process that we were in during the second world war when we were attempting to fly the P-47 faster and faster by turning the propeller faster and faster. Our big problem was that we weren't taking into consideration jet

propulsion of the aircraft. This is the big change, in my opinion, that we've got to introduce into education. Buildings are not the critical thing; organization is not the critical thing; but it is an adaptation of facilities and the use of the best we have to teach children today in our public schools.

Dr. Cameron: After Don Leu says anything he wants to say we will give Joe McCarthy another chance, and then turn to the audience.

Dr. Leu: I'd like to ask a question. As we said earlier we are all learning about the educational park. We are a long way from the final chapter. One of the problems of any new venture is the unanticipated consequences. I don't know about you, but I personally hate to go back and look at some of the great ideas I have had. In execution they don't work out quite that way. One of the unanticipated consequences is the problem of transportation. I'd like to direct this question to Joe and to Mr. Stedfast. What about the problem of cost, the problem of time, the problem of control of large numbers of young children on buses? You can go rapid transit, or you can go private cars, or you can go bussing, but in all cases you've got a lot of unanticipated consequences. I'm wondering Joe, how you've considered this problem?

Dr. McCarthy: This is the spot isn't it? Actually, when I said in my presentation that the Northeast Bronx gave us an ideal situation to test the educational park idea, I was not telling the complete truth. From the point of view of transportation it was not an ideal test, and the reason I say this is that the majority of the children who will be going to this educational park will be going there by foot. A majority of the children will live in the immediate vicinity of this park. We have taken into account the problem of bus transportation, and we have provided a sheltered bus loading and bus unloading area. Our concern is not merely getting kids to and from school but moving them around the park safely and expeditiously from one portion of it to another.

This internal transportation or pedestrian traffic I think is the kind of thing that we are in a better position to say that we are working on than the transportation to the park. I mentioned this because many of our children will be walking; and we have a built-in plus factor on kids coming by other means of transportation. This new apartment project I have described to you is to

have a bus of its own—a public bus, going from the apartment project to the city subway system to drop people who are on their way to work. On its way back it can bring the same bus loads of students back to the school park. In this particular position we are quite unique. A transportation area that we are very much more concerned about is the transportation to and from Kennedy Park, which is on the other side of the Bronx. Here, there will be heavy pupil use of the subway system. It's located at the northern end of the subway, so many of the children will be coming from the business area—moving against the major flow of commuters. But we expect to have, as a matter of fact we have at the moment, traffic consultants at work on this. They are encountering more problems than we have in the vicinity of the Northeast.

Mr. Stedfast: I think that the answer to the question—after recognizing the urban situation, the size of the city, and the service area—has to reflect also the existing transportation network, whether it be a street system with the use of private cars or some kind of rapid transit system. We are a long way from implementation of some of the more exotic things that you read about. This is an experimentation under way which we all hope will be fruitful. In the Norfolk situation, this is a "we fry ours in butter" kind of situation. We are talking about a truly cultural kind of park which would have a universarium, a planetarium, and oceanographic work, and a performing arts center. It is assumed here, I believe, that the use of the facility jointly by all schools as well as the community at large will call for some kind of special transportation system for the children.

We have a vocational school which is served by several high schools from which the students will go out to the vocational school. My guess is that our situation will resort to that sort of thing. I don't know the answer to this. I had a good friend who was once a city manager in an up-state New York city. He more recently became the Director of Planning for the Port of New York Authority. I saw him soon after he took the job, and I asked him how in the world he could cope with it. At the time he was discussing with me the cost of the approaches to the new George Washington Bridge, and it was astronomical. I said how do you cope with this, and he said, "I just automatically drop the last three zeros."

I don't know what Dr. McCarthy has other than what he has

told us. It seems to me that if this kind of thing is to catch on in our city it is going to be a real tough nut to crack. Let's make no mistake about it. The rapid transit systems in this country that are making any money can be counted on the fingers of one hand. Unless it's to be heavily subsidized by the federal government or locally, I don't know how this question is going to be answered. If you are dependent on a limitation to service area, the reasonable distance which you can expect to walk the child, then it seems to me you are talking about educational parks only in extremely dense situations. The population density really almost gets on the New York scale.

Dr. Cameron: Dr. Carmichael has to leave in about eight or ten minutes so let's start with him so we can take advantage of the few minutes he has with us. Is there a question that you would like to direct to Dr. Carmichael? All right, we'll open it up to questions to any member of the panel.

Question: Dr. Carmichael, inasmuch as you made some very kind remarks this morning about Jefferson City High School, it is safe to say, I believe, that the analysis has been complete.

I would like to direct a question to Dr. Leu. Is it feasible to make different structures to be in close proximity, let's say on an elementary and junior high school level, to develop an educational park?

Dr. Leu: Again, we can't answer a specific question. All I can say is that in several of the educational parks we are developing we are using existing structures as one part of the park. We are rediscovering some of the things that you people have discovered, however. The buildings are structurally sound and educationally obsolete. When we start to convert these buildings to the newer types of curricula and programs we tend to be pouring money down a rat hole in spending a lot of money on a building that is still educationally obsolete.

My answer to your question is, yes we are. We also have the problem of public acceptance. We will have to use these buildings in many of our school districts for many years. We have no choice but to do it. It makes our architect friends sick when we try to use them for educational purposes and it makes our teachers sick when we try to convert them for some different type of use. So all I am saying is "Yes, we can"; "Yes, we do"; and "No, they are not working worth a damn."

Dr. Cameron: Dr. McClurkin tells me that we'll give proceedings out and everybody will get a copy.

Question: Dr. Carmichael, we would like to talk about transportation that involves time and usage. For one thing transportation is considered by the school board and graduates up here as a big asset educationally, or they wouldn't be going before the microphone and boosting it. Would you mind clarifying what type of bus ride is wasted, or can be converted for educational purposes. Or, whether or not transportation time might not be converted from idle time to profit time?

Dr. Carmichael: It is time that is not spent profitably now. I didn't spend the time I rode those sixteen miles profitably. We now have proposals for spending it more profitably by using various means to provide assorted types of education. I'm not optimistic about it. There are some technical problems that need to be worked out. Usually, I know the child who gets on last in the morning gets off first in the afternoon. We have similar little things to deal with, which may not be significant. The architect working with us in the design of mobile facilities is quite strong on this point, thinking that advantage can be taken of it. That's as far as I could pursue it at this point.

Question: We've talked a great deal about a variety of things, some of which vigorously emphasize factors that are not educational. We've talked a lot about sociological factors and the impact of these ideas. We've talked about an effort to try to coordinate a number of different agencies. We've talked about a need for better communication. A lot of these things seem to fall outside of what is traditionally considered the educational circle, which is ever expanding. Can you gentlemen who have had a lot of experience doing school plants, give an example, in some area, of coordination between the federal government and the educational authority in that particular area? Is there any example of any union of schools or the educators working in these fields and these other programs which seem to be going side by side from a financial point of view and from an efforts point of view.

Dr. Leu: I could go on for about six hours on this, but I'll try to do it in six seconds. In one of our programs in a rural area in Thailand we couldn't get the missionary schools together because they were all duplicating the same services for the same client.

tele, the hospitals, and so on. The only way we could link them and get them together was the common sewer system. So apparently sewers are a more common and important bond than other types of services. Actually, educators, in my opinion, have got to get into the social, economic, and political arena because most of the basic educational decisions are being made outside of the educational system. To be specific, you wanted to ask me about the quality of education in any suburban school district. I wouldn't even look at the schools, particularly if I'm looking years ahead. I'd look at such things as zoning and master planning. The federal government, for example, is making most of the educational system decisions in many of our central cities by urban renewal policies and by highway policies, because highways are splitting communities and neighborhoods into pieces with very little concern about the educational implications.

The point I'm making is that the day of separate planning or the day of major educational decisions being made by noneducational agencies must come to an end. The sooner we bring it to an end, the better job of educational leadership we are doing. I don't mean that we have a blank check, but certainly we must get in the ball park of determining what a city, or a suburb will be, what its fiscal base will be, and what kinds of services will be available. So, I am saying that the educational leader suddenly has to become a political leader, he has to be a partner in bed with the urban planner. I don't like to get in that bed, sometimes, but those days of planning in isolation are about over.

Mr. Stedfast: It may not be specifically to the point, but I think there is something that you should be aware of. In the newer urban renewal projects, those which are just beginning to get underway now, I believe we are going to come quickly to the day when we are going to see the federal government require what is called a diagnostic survey. This is a 100 per cent sample. They pay two-thirds of the cost. Out of the diagnostic survey comes a fairly good profile, depending on how carefully the survey instrument itself is drawn—the questionnaire on the needs and the social, education, and cultural problems of the people in the area to be served by the project. Out of this diagnostic survey also comes a referral service. You mention the neighborhood facility concept. In many cases we are seeing neighborhood facilities being started without being labelled neighborhood facilities. They start out as a field office for an urban renewal project and

the next thing you know you've got the visiting nurse going in there. Maybe you've got some school guidance people going in. Maybe there's some legal aid services, and things like that.

Dr. Leu may not like to get in bed with the urban planner, sometimes; but what he will find is that we will be getting into bed together with a whole bunch of other people. I think from this will come part of the answer to the problem, and that is the "total approach." No longer will the urban planner be looking only at urban planning. No longer will the school people be looking only at schools. It will become a real concentrated effort to try to do something about upgrading the total welfare of the people who live in this area and the city as a whole.

Dr. Cameron: A good example of what he is talking about is the Model City program which involves many, many agencies in the city in planning toward common objectives—in which none of the groups plan in isolation.

Mr. Bailey: Dr. Carmichael would you comment a little further on the statement that the kindergarten today is obsolete and indicate what changes are being predicted?

Dr. Carmichael: I welcome the opportunity to comment on that. I made a statement that the conventional kindergarten is obsolete, first on the basis of the fact that information now very clearly points out that nearly 60 per cent of the child's mental development has taken place by the time he reaches conventional kindergarten. Conventional kindergartens designed for the five-year-old, which is the best we could possibly do now in proposing new kindergarten programs for Tennessee, Kentucky, and West Virginia, etc., would still be hammering away and not taking advantage of knowledge which we already have with regard to this.

Secondly, kindergarten has been designed for the average middle-class youngsters. We are not getting at the problems of the really deprived children, either in the ghettos of the city or in the rural areas. Thirdly, it's a type of kindergarten program which is not necessarily adapted to the youngsters' temperament and attitude at this particular time. Youngsters are not ready for regimentation and the classrooms of our kindergartens generally in the way we are placing them there, putting them in the same mill that we have going for the average child, and for Grades 1-12. In my opinion, it is an unrealistic way to look at needs of early childhood education.

I am in touch with the major sources of information from the R & D Centers relative to early childhood education. The whole picture shows that we have very little to gain by trying to implement the conventional kindergarten as it has generally been proposed. I think there's a way to get at this problem in a far greater way. Not many of us still have the opportunity to make this decision. For some of us who do have the opportunity to make it, I think we have a chance of a lifetime to make a real switch in the turn of education for youngsters.

Dr. Tollerud: I wanted to ask Dr. McCarthy what the approximate capacity of the auditorium would be?

Dr. McCarthy: Fifteen hundred. May I throw in one other point in regard to that. One of the continuing problems in our city is encountered at high school graduation, where a high school may graduate nine hundred or a thousand children. You need an enormous space in order to allow each child's parents to be present. That alone will run you the three thousand. We have tried, because of the fact that there are several gymnasiums side by side, to arrange an area for a substantially larger meeting place for occasional purposes, such as a high school commencement, but the regular auditorium is fifteen hundred.

Dr. Tollerud: What about spectator seating?

Dr. McCarthy: For basketball and things of that sort we are going to have spectator seating which will be folded back into the walls. When we open two or three or four gyms into each other that seating probably will not be used. Rather, we will use the sort of seating we have here. (Folding chairs).

Dr. Tollerud: What will the total seating capacity be?

Dr. McCarthy: The architect tells us that he will be able to put forty-four hundred people into this. That's a very substantial number.

Question: From the statements that have been made here today, I get the definite impression that the educational park is more suited to metropolitan and urban areas. I'd like to know if that statement is true, and also, what planning, if any, has been made to upgrade existing facilities in which the elementary schools, junior high schools, and senior high schools must continue to operate.

Dr. Leu: I hear two different questions. As to the first one, actually the educational park is catching on just as much in suburban and rural areas as it is in the central cities. It has taken a different form and a different texture. For example, it has even taken place in some of our developing nations. It is not a peculiar animal of the central cities. In fact, we are attempting some educational parks which we call "putting on neutral turf," and that is putting it in an area that is the perimeter between the suburbs and the cities. Right now the suburbs are turning their backs on the central cities because most of the people moved out there to escape from the central cities and they don't want to touch them. I think we're going to find the suburb finally coming to the realization that this is their place of work, this is their city, it provides their services, and those people from the city are going to reverse the cycle. I think we are going to find eventually some educational parks serving both the city and the suburbs in a super school district or some type of co-op arrangement. We've tried a couple of them already and those we have tried haven't worked because the person who moves out into the suburb isn't about to send his child down into the ghettos to be educated. I don't blame them. I think that's a natural reaction, but to answer your question, it is not a peculiar animal just for central cities.

Now your second question was what about doing something about our elementary schools and middle schools, the junior high schools and secondary schools. I am sure you are well aware of the number of projects on curriculum change and change that has taken place, primarily in the suburbs and very little in our central cities. We do have middle schools that are in operation, we do have team-teaching, large group instruction, nongraded, and so on. This is taking place all over the United States. I think both of those are happening.

Question: What is the justification for the emphasis being placed on the big educational plant? The diagnostic fiscal aspects of the future recommendations say that we have reached the point where we start recycling the central cities. Are these diagnostic surveys pertaining to that, or only for a given urban renewal project?

Mr. Stedfast: I'm taking the second question first. A diagnostic survey is undertaken in a specific urban renewal project area. The urban renewal project area may either be a clearance area

where you are trying to get information on the people who are going to be displaced so that you can adequately relocate them and provide for their other services, or it may be a concentrated code enforcement area where a minimum housing code is to be enforced on an area base. In those situations, the diagnostic survey is intended to help provide insight into the social, economic, and cultural problems of the people. A referral service is set up, and there is a required follow-up. In other words, it's not enough just to create the structure. One of the big problems, incidentally, is trying to make the private agency, many of which are not low income oriented with their program, aware of the program needs and changes which will be required of them. This is part of the effort of the federal government to recognize that more than just poor physical quality causes slums. Some of the problems which we have been living with this summer come out of our slum area.

With regard to the investment, the first question, I'm not sure that we have enough information at the moment on per capita cost. This is a 100 per cent sample now. This is every family in an area that we really are doing business with. I expect that much of the cost experience is going to be determined by the objectives of the individual city program in that area. Some cities are heavily committed to the social improvement of their cities; others are not so heavily committed. My own impression, based on our Norfolk experience in a very preliminary way, is that it is extremely worthwhile because for the first time it will provide us insight into the kinds of programs which are needed and give us, perhaps for the first time in Norfolk, a chance to do something about the total problem rather than these individual isolated kinds of situations. We see the possibility of working with the school people on special remedial programs. We see it perhaps in the provision of psychiatric services, or special services to the unwed mother. These are the kinds of things which historically have characterized the social programs but which have never been geared to the low income group. I'm not so sure what kind of an answer that is.

Question: I am going back to the question that Dr. Trotter raised about the curriculum in our schools. Can we justify going into this park-type system merely based on the fact that we can offer a type of curriculum or course of study in this structure that we cannot offer in the structure that we are now operating? Or, are

we trying to meet some logical needs or some other needs within our community as well as this.

Dr. McCarthy: I believe that it would be very foolish for us to build an educational park so we can offer a course in Chinese. It would be a heck of a lot easier to hire a Chinese teacher and have him run around and give individual instruction than to build a park just for a course, if it's just one course. I think that the total offerings of an educational park can be much more varied, and that this varied offering can be an educational plus factor sufficient to warrant considering an educational park as a solution to the building needs of the community.

Dr. Leu gave us something this morning which is very pertinent, a long list of advantages and a long list of disadvantages. Planners can look at these and decide which are pertinent to a particular community and which of the objectives they want to accomplish. It's my belief that you can probably anticipate better teaching and better learning in a park situation than in a series of separated schools. I think that some facilities can be warranted to make better instruction more reasonable, more likely. It's easier to justify, for example, the installation of a planetarium projector in an educational park than it is to justify one in an individual school yet every school teaches kids something about astronomy. It's difficult to teach out of a textbook or with small scale models, so there can be a good argument based on improved instruction, a good argument based on improved course offerings.

In my presentation I tried to indicate that the entire educational park project began in the first instance in New York as an answer to a sociological question, the question in the general field of integration. I think it would be false, bad business, for me to suggest that this is, in my judgment, the only advantage in the park. As a matter of fact, I've gotten enthused enough about it, and I should warn you to watch out for an enthusiast to believe that a park could very well be justified educationally in a community where there is a single race, where there is no question of integration at all, simply on the basis of improved educational offerings. But, I wouldn't pick out any one course and say, "Gee, let's build a park so we can have a course in classic Greek."

Question: I'd like to ask Dr. McCarthy, in regard to construction costs, if they ought purposely to make a deliberate list of all

products to know if there are advantages to this innovation that are conducive to the schools as we have been building them.

Dr. McCarthy: I don't yet have accurate enough cost estimates to give you an answer to that, but I'll give you an answer in this way. We have computed the square footage of instructional space and administrative space and eating space. There is in our Northeast Bronx Park an increase of between 8 and 10 per cent of square feet over buildings of conventional schools according to our conventional model. Some of these increases are in the form of additional facilities. Some of them are in the form of different proportions of existing facilities. For example, in our educational park we are requesting, and I think definitely are going to get, an increase in the library space over the spaces that would be allotted in conventional schools. The resource rooms that I described with the classroom clusters do not exist in the conventional school structure. No, we don't have a cost estimate but the 8 to 10 per cent increment in terms of square footage, I think, is a fair indication that the cost increase will probably run around that same percentage.

Question: Dr. McCarthy, you indicated that your present teachers in the classroom program would involve traditional teachers and conventional teachers. Would you recruit from this group for this new school, or must you have totally new teachers come in? What are the implications for teacher recruitment?

Dr. McCarthy: That was a loaded question like "Have you stopped beating your wife?" Did we ask for conventional or ordinary teachers, no we didn't. We were looking for the extraordinary teacher. For example, one of the people that we used in drawing up music specifications is a cracker-jack music teacher not by any stretch of the imagination a run-of-the-mill type individual. Our recruiting within the park is hypothetical because we are still several years away from it. At the present time, I have a file on my desk bulging with letters of inquiry and applications from teachers who think that this might be a nice place to work. I believe that the facilities will be a magnet for people. This will not be the answer by itself. I think we will have an opportunity to attract people to the park who would be interested in working in it. "Can we make them better teachers?" is another question. That depends on the operating atmosphere of the

school, the way in which the educational park begins and continues. Again, this is only a hypothetical answer to your question.

Question: Do you prefer to take a good teacher, a good traditional, conventional teacher, and send him in rather than requiring teacher training institutions to provide a totally new teacher.

Dr. McCarthy: I don't see that we are developing a situation which would call for completely revolutionizing the teacher-training program.

Dr. Trotter: We have heard a lot of discussion today about advantages of educational parks, about the disadvantages of educational parks, and this sort of thing. We've heard a lot of discussion about what's being done and about what's happening. We've heard some speculation about what all this will p... in the future. I guess what I really want to say is that we need to really be honest with ourselves. If we're building educational parks for sociological reasons, then this is one thing. If we're building educational parks for educational reasons it is something else. I'm not saying they're not related, but we need to recognize these things. We need to be able to have some research, and we haven't got educational parks yet. You say how do we get the research before you get the park. Well, we need some basis for justifying what we are doing rather than "I think this and I think that." I guess what I have already said is that we need to be honest with ourselves and be sure that we really know what we are doing, rather than doing one thing and trying to justify it with another purpose or another reason.

Question: There seems to be some difference of opinion on the value of educational TV to the various school solutions. One solution seems to be almost totally dependent on educational TV. If one subscribes to that solution then there seems to be in the sociological ramification no particular advantage to the park solution, if we are to get the kind of advancement in creating the E-TV the reference was made to.

The gentleman who was relying greatly on the TV is gone. Is there some difference, or could anyone comment on their opinion on the value of educational TV?

Dr. Gibson: I don't think that Dr. Carmichael meant to leave the impression they are relying completely on educational TV for

this innovative program he was discussing. As I heard what he said, he was going to have a master teacher develop a subject area in terms of a complete strand of information running through possibly nine courses of social studies. He would have that on video tape which would be piped into classroom situations and discussed there under the leadership of the classroom teacher. So, in that respect, I think probably it would be a very fine adjunct to the educative processes that he was describing. Educational TV has gone full cycle in many places, as have teaching machines, and language laboratories and many other kinds of supplemental educational devices which at one time were being counted as the panacea to many of our instructional problems, just as the educational park in some areas is being counted on as the answer to our organizational pattern of the future. Neither is true. Each has its place, but each has to be analyzed and the tool used only where it is a tool. I think the problem that we face is much as the one we faced after Sputnik. We had the big rush to science and math as the big emphasis in our curriculum, much to the imbalance of other areas in the curriculum which only now are beginning to be balanced out again. So, we have a tendency in education to go "Gunho" for an idea without much respect to whether it's applicable to our own situations or not.

CONFERENCE SUMMARY

Dr. Cameron: We are fortunate to have with us John Gilliland who will summarize the conference.

Dr. Gilliland: Thank you, John. What better way could you tell a guy not to talk more than ten minutes than to say there'll be a fellowship hour in fifteen minutes. I do appreciate all you people who are faithful and stay here and help me out because I've got to get that green check signed just like you have. If you don't stay I might not be successful in doing that.

I've learned through our discussions today that two or three things are common to all of us. Number one, we all have problems and that there are different dimensions to those problems. Our problem depends on the locality in which we operate, the school systems, the size, and many other related factors, all having to do with the dimensions of this problem. I've learned that we all want quality education. It would be foolish, wouldn't it, not to want quality education? We are searching for ways to

improve our program all the time. It is well to do that simply because we are living in a dynamic society, and the minute we stop trying to improve, to grow, to develop, to get ourselves in a position to do a better job tomorrow than we've been doing today, we fall behind.

You know, one of our great problems in education, I think, has been pointed out here many times today in these discussions. We're too much like what Mark Twain said when he referred to the weather. "We all talk about the weather but we don't do anything about it." We can't do anything about the weather, but we can do something about our educational program. It takes leadership. It takes interested citizens. It takes a program of interpretation, and to me, there seems to be no better way to get this type of interpretation and understanding that we so greatly need in public education today than to involve people.

It was a pleasure for me to hear Donald Leu give his precise and straight statements from the shoulder about the advantages and disadvantages of the educational park plan. Remember, he pointed out to us that the educational park was not a panacea for all ills nor a solution to all problems, but it can work in certain situations as a cultural center whereby we can come nearer having a quality educational program. As Dr. McCarthy spoke to us about New York City I was reminded of the fourteen months I spent in New York City several years ago. I hadn't been there very long until I decided, and I still feel pretty much that way, that if anybody can do anything for New York City we ought to listen to them. They have problems.

I discovered when I went to Tennessee that we had problems in Tennessee, too. I got over in the East Tennessee mountains and saw people looking around the house, the corner, at me, and I got back in those mountains on surveys. Maybe they were diagnostic surveys, I don't know for sure. You see, that fellow over there wanted to know what we were looking for; and I find that pretty true wherever I go, that people want to know what you are looking for and what you are trying to do. I think that's been ably pointed out today in our discussion.

Dr. Carmichael and his Educational Cooperative pointed out a plan for getting or improving quality education in the Appalachia Region through a network of Educational Cooperatives. You remember his management systems, his subsystems, his media subsystems, personnel, mobile facility, central facilities, concern

for content? He talked about that again here on the panel this afternoon. Of course, those are the kinds of problems that we all have in large measure wherever we are. The kind of thing that I have received, and the encouragement that I have received in listening to the presentation today has pointed out to me that there are different ways toward a solution to these problems.

When you talk about an educational park, I think we had a little educational park deal over in East Tennessee not long ago in a rural county, McNairy County, where they consolidated. We call it consolidation of five high schools, and the total enrollment of all five high schools amounted to a little less than twelve hundred pupils. They became so stirred up about that over there, those little communities that were losing their school, the last semblance of the greatest community force that was left, they were about ready to shoot each other. And then I think about how those people came in, those for and those against, and listened to a story and sat down with a group and talked about what they could do in this facility, program-wise—things they couldn't do or hadn't been doing in these small facilities. The opposition dwindled, and today they are building a comprehensive high school based upon a program defined through working with the people in the community and the staff, utilizing that by talking about: What do you want to do in this facility? What should we be doing in the facility? How do you do it? What kind of spaces do you need to carry out this program? What kind of equipment do you need?, facing up to the fact that we are building for tomorrow a school that will serve the needs.

It points up the other consideration that the panel people, the students and the teacher, Miss Hawkins, who called us back to order so ably and said, "When are you going to take us teachers in?" This is in semblance very close to what she said. When are you going to take us back, help us keep us? You know the time has come, and I'm sure you all realize that, and it's been pointed out here today, that you can't design a new facility, you can't decide what kind of program is going to be in this facility without taking a large number of people in on this planning process. I see Dr. Letson, superintendent of Atlanta, over here to my right. He's going to speak to you later on this evening at the dinner meeting and I know you are in for a treat. He knows that we spent nine months in Atlanta talking about these things with the State Department of Education, the Vocational Service Depart-

ment of both systems, and the educational leaders. He knows very well that the only reason we were able to come up I think with one of the finest programs and one of the finest facilities in the nation, a vocational technical school, was because we had leadership at the local level. We had participation, we had involvement of people on a wide level, all the agencies insofar as we could possibly obtain them, and we arrived at a facility.

I think this is some of the kinds of things that we have to take into consideration as pointed out today in new directions for educational facilities designed for quality education. You see, the important things about all of these plans are the systems that we've talked about, and we are famous in education for giving new names to get over a new idea or just a little bit of an addition. Donald Leu pointed that out this morning. But the important thing about it is what we will do, who will provide the educational leadership, and how well we involve people in planning—how we get down to the grass roots. When we plan something and the people know about it and they understand it, they'll move into it. And it will be a much more successful venture, much more successful facility because these people do know about it.

It's good to give consideration to these new types of organization. Call it the educational park, the educational cooperatives, or whatever you want to. It just means that we approached it a little differently, we give consideration to new ideas, and who am I to say that the educational park isn't the finest thing that's come along in New York City or some of these other places. If that will work better than what they have been doing, "God speed to them." I think we ought to give serious consideration to that and I think it has, for their kind of program and what little I know about it, real promise Mr. McCarthy. I want to support you in your undertaking and I'm glad to see that you have enthusiasm about it.

Now, in doing all of this we've got to refine our procedures. We've got to involve people. We've got to be ready for change by facing the fact that change is inevitable and we've got to consider constantly new ideas in education. We've got to take the teacher in on it. We've got to do the kind of things that work. Above all, we are talking about implementing a program. We are talking about the philosophy, I think, or the feeling or the concept that you make or break a school facility when you move

inside and what you do to it, how you handle those spaces. We call it environment for learning. Maybe that's a new name or a different name but that's what it is, those kinds of conditions inside that make it possible for people to perform at an optimum level. Barney Kizer over here, I think, was with me when I talked to one of the teachers at Northwestern State College down at Natchitoches, Louisiana. It took me three months to learn how to spell that word, let alone how to pronounce it. I talked to this teacher who had carpeting on the floor. I said, "How do you like it?" She said, "It's the greatest thing that ever happened." I said, "What do you mean?" "Well," she said, "I last longer, I have less discipline problems, kids perform better, and above all, I feel better at 3 o'clock in the afternoon than I used to feel at 10 o'clock in the morning." And she said "If I had known what carpeting does, would do, for an old gal like me I'd have paid for it twenty-five years ago if they'd let me put it in." Those are her true words the way she stated it.

We don't put carpeting in a school to be different or to be innovative. We put carpeting in a school to improve the learning environment, and to me these are the tactics we need to take. We need to consider the program all the time and try to work out these facilities so we have a better environment for learning. I think that it's worthwhile that we gathered together here today to consider these things. I will confess that I didn't know nearly as much as I should about the educational park idea, or building for quality education—new directions for educational facilities. It has been a great experience for me, and as I have mingled around with you at the coffee hour and the lunch hour, I think it has been a good experience for me and a good experience for you. John Cameron, this has been a fine meeting.

Dr. Cameron: President George Bailey of the Interstate School Building Service will preside tonight at the banquet on behalf of the Office of Construction Service. I'd like to express our appreciation to the people who have participated in the program and to you, the audience. To us, it has been a delightful experience. You are adjourned.

EVENING SESSION

Dinner, Hermitage Hotel

Presiding: Mr. George Bailey

Speaker: Dr. John W. Letson, Superintendent of Schools, Atlanta, Georgia

MR. BAILEY'S INTRODUCTIONS

Mr. Bailey: I want to introduce some people to you, since some of you were not in our meetings today. Here at the head table we have from Washington, D. C., Commissioner Walter Malcolm, Acting Commissioner of the Office of Construction Services, U. S. Office of Education; Dr. John L. Cameron, Director of the Division of Facilities Development, Office of Construction Services, U. S. Office. It's under these men that the program of today has been developed and carried out, and we certainly appreciate their efforts. I missed the most important person here, my wife, Clara; next is J. H. Cammon, Chief of School Plant Services, State Department of Education in Georgia, and Mrs. Cammon; next is one of the officers of the Interstate group, vice-president this year and president-elect, Nelson Waldrop from Virginia. We have a special invited guest who came down to see how we operated, Mr. Guy Tollerud, from the state of Minnesota.

Before we present our speaker tonight I want to say a word about our Interstate program which starts tomorrow morning. Our program this year is concerned with maintenance and operation and building renovation. Dr. Ralph Finchum from the U. S. Office of Education will make the opening address. These people will help us in the first part of our program on maintenance and operation at the state level: Dr. Robert Stafford, a consultant engineer from Charlotte, North Carolina, is here tonight. Mr. L. E. Atkins, Jr., who will be discussing school building hardware, is here. Mr. T. W. Hancock, a school principal from Muskogee County, will be discussing floors.

There will be two more sessions which will be concerned with renovation of school buildings. On these will be Mr. Ben R. Graves, the project director of the Great Cities' Program for School Improvement. I don't believe that Ben has arrived. The other person on this program is Mr. John D. L'Hote from the Detroit schools. He was mildly involved with some of the doings up

in Detroit recently. About 15 of his schools were used to house troops, and he said that was a new experience.

Our speaker tonight comes from the great state of Georgia. We stole him from the state of Tennessee a few years ago. Dr. Letson is a native of Alabama. He attended high school in Alabama, and graduated from Auburn University in 1932. He got his doctor's degree from Columbia University in 1949.

His employment has been in all phases of school work from teacher, principal, area director, assistant director of the division of administration and finance with the Alabama State Department of Education, superintendent of Bessemer Public Schools, Bessemer, Alabama, superintendent, Chattanooga Public Schools, from which place he came to Atlanta and became superintendent of Atlanta Public Schools on July 1, 1960. He has been a visiting professor at the University of Florida, summer session 1954 and again in 1956, and at Florida State College in 1957.

He belongs to many professional organizations and committees, among which are the National Education Association, the American Association of School Administrators, Southern Association of Colleges and Schools, Joint Council on Economic Education, trustee, Horace Mann League, member of the board of directors of the Rotary Club, Phi Delta Kappa Fraternity, the Cleveland Conference, National Advisory Committee for Vocational Education, National Council for Vocational Education, National Council on the Humanities, Georgia Science and Technology Commission, Scholastic Publication of National Advisory Council. I don't know how he finds time to fool with schools in Atlanta.

He belongs to a number of civic and community service organizations: Atlanta Rotary Club, Atlanta Sales Executive Club, and others. He belongs to the Economic Opportunity Authority of Atlanta-Fulton County, Junior Achievement of Greater Atlanta, and Atlanta Y.M.C.A. He is a member of the Board of Directors of the Fulton County Board of Health and the Atlanta Association for Retarded Children, and the United Field Board of Trustees. He is a Methodist, belonging to the Peachtree Road Methodist Church where he teaches a men's Sunday school class. He is married and the father of five children.

Dr. Letson, we are delighted to have you with us. It may be a good thing that you missed some of the programs today because you can start out with new life here and tell us about your city planning in Atlanta.

TOTAL COMMUNITY PLANNING

John W. Letson

Dr. Letson: Thank you, Mr. Chairman, for that most generous introduction. It is a privilege indeed to be here and to have an opportunity to be a part of this program. I did have an opportunity to participate in a small way in a part of the discussion this afternoon and I enjoyed it very much. From all the reports that I have been able to get, it has been a very worthwhile conference.

I would like to say in the beginning that I do not bring any positive answers. I'm not sure there are any positive answers. I feel a little like the superintendent of schools, though, who had a rather serious heart attack. He received a wire from his board of education saying, "By vote of 5 to 4 we are wishing you a very speedy recovery." I have an idea some of you know what I am talking about. I'm not at all certain but what some of the discussion and some of our thinking reminds many of us of the story that is told about the Tour Director down at Chickamauga just below Chattanooga. The bus driver was leading a tour and visiting all of the monuments down there in the national park. He would pass by a series of monuments and comment: "Now, ladies and gentlemen, this is where 560 Southerners just mopped up the earth with 1,050 Yankees." He went on over to the next series of monuments: "Now over here is where 3,000 Southerners just beat the hell out of 5,000 Yankees." "Over here is where 7,000 Southerners just annihilated 12,000 Yankees." Finally one lady on the bus had all she could take. She said, "Wait just a minute, do you mean to tell me that the northern forces didn't win any of these battles?" He said "Hell no, lady, not as long as I am driving this bus."

I could draw some parallels and could talk at length about the fact that we in the South may have been operating on this basis and have failed to look at reality, at least to some degree. I think we are face to face with the necessity right now of looking facts squarely in the face, and planning our course of action accordingly. Bobby Dodd, down at Georgia Tech a year or so ago, sent in a quarterback with a specific instruction, "Now don't you throw that football if you get within a certain distance of the goal line." Well, the quarterback didn't pay any attention to the instructions, or else he was so excited that he forgot it, for he tried a pass after he was in the prohibited distance of the goal

line. As you would imagine the pass was intercepted. The man who intercepted took off on his way to the goal line. The man who threw the pass, the quarterback who wasn't supposed to be able to run that fast, overtook the man who intercepted the pass and tackled him before he made the touchdown. Somebody asked Bobby Dodd the next day how in the world that happened. How could a man run that fast when, according to his record, he couldn't run that fast? Bobby Dodd said, "Well, it's simply a matter of motivation. That man who intercepted the pass was just running for a touchdown, but that quarterback was running for his life."

I really think, if we boil it down, we will have to accept the fact that education today, to an extent never seen before, is really running for its life. I'm sure this has been repeated often enough to be a cliché, but in all seriousness I know of no period in educational history when our challenge was greater than it is today. I know of no period in our history when the opportunity for public education was any greater than it is today. For a long time, we've been giving lip service to what we've accepted as an American goal. We've been talking about educating all of the children of all of the people. We have accepted the fact down through the years that this was a basic part of the commitment of public education. Yet, if we look at the record, we know full well that we haven't done a very good job of accomplishing that goal.

I don't mean to imply that we should not point with great pride to the accomplishments that have been made—accomplishments that have been a part of the growth and development of public education. We don't have to look very long to see a long list of things that have been accomplished by public education. We have better schools today than we have ever had in our history. We have more young people remaining in school for a longer period of time. We have an educational program that's the envy of the whole world. All these things are true, and it is appropriate and proper that we acknowledge these facts and recognize that they are true. At the same time, we don't have to look very far to recognize that we still have a long way to go if we are truly going to educate all of the children of all of the people.

There was a period of quietude in our history. Many of us are reaching the age that we are looking back rather longingly to a

calmer, quieter day. If I had a choice I'm not certain but what I would still like an old Model T if I could have all of the things that go along with it. It was the kind of an automobile that you could pull out under the apple tree, and a teenage youngster could tear the thing all to pieces and put it back together again and make it run. But, we are living in a time in the world when you can't find anybody in a garage who can tear down your present automobile and put it back together and make it run. Regardless of how we might think about and look back toward a calmer day and compare it, we are living in the kind of world that's moving very rapidly and it's not going to be like it used to be and we're going to have to look the facts squarely in the face as they are.

Someone asked an Atlanta resident, "How do you spend your spare time in Atlanta?" He said, "Bumper to bumper." I have an idea that's in common with the experience that many of you are having. We talk about school parks. I'm certain that this business of bumper to bumper is going to be accelerated as a result of the school park development unless we can find some better answers to the transportation problem. But we have no alternative but to find some of the answers to some of those problems. My father had a colored janitor that he called into his office one day. He said, "Sam, just look at this dirty floor, and you didn't dust my desk, my pencil sharpener is running over, my waste basket's full. Sam, if I was janitor of this school I know I could do a better job than that." Sam looked at him and said, "Yah sir, yah sir, dem what don't have it to do most generally do better than them what has it to do."

That is as fine a bit of homespun philosophy as I've ever heard. It definitely has a relationship to this business of operating schools and how we devise a plan that will make them most effective. So, if we evaluate the factors that are a part of the world in which we live, I think we will have to come realistically to the conclusion that regardless of how good education may be it is not good enough. All of us who are a part of education have no alternative but to be realistically involved in the urgent necessity of finding some better ways of doing the educational job that we are all attempting to do. I know your group has been concerned and has devoted today and will continue to devote time because of your particular concern with building facilities—how

to devise and design the facilities that will make it possible to accomplish improved educational purposes.

We used to say that the way you design a building is to decide your curriculum and decide your program and then build your four walls around it. Yet, with the speed with which things are happening, I'm not at all certain that we can call upon the people who are now involved in the educational instructional process to determine the kind of program that is going to be necessary in the years ahead. As I view the educational program that will be necessary in the years ahead, it will not be like the one that we now know. To accomplish this kind of change is not easy because there is nothing more difficult than to change people. There's nothing more comfortable than a rut, for example. We know its dimensions, its depth, its width, and it's a very comfortable place to be. What we really need are more cockle burrs under the saddle blanket.

I'm suggesting that it is possible for school plant designers to have a real impact upon this process of constructional change rather than to follow the pack. School plant designers from my standpoint must lead the pack because you are the ones who are responsible for the construction of facilities that are going to be there for the next 50 to 100 years if those we are now using are any measure of how long they will last. School plant designers now have a part in determining the direction of educational change, and determining in a very real sense the quality that education will possess in the years ahead. This is no easy assignment as you and I know. You have some real questions to answer. Do you design a plant that is more forward looking than the people who will use it? Do you design a plant that has some forward looking ideas incorporated in it, and then experience the frustration that comes with going back, visiting that same plant, and seeing it operate just as it would have operated had it been constructed without your ideas? I'm sure you've experienced that kind of frustration as have all of us. It's a lot easier to change the physical things that are a part of plants and buildings than it is to change the concept and abilities of the people who are to use them.

If I have any message to present on this occasion it is to indicate that there is a direct relationship between the teachers and the school plant. The school plant can have a tremendous impact upon the process of change that must go on as a part of the edu-

cational program. There are a few things involved in this process of change that I think we should explore because I'm convinced that the time has come to make some fundamental changes. A few of these changes I am going to talk about are directly related to this question of building and to the changes in curricula that must take place.

Some of these changes are inevitably related to structure. We have a school year, for example, that is an outgrowth of an agricultural past. It has a relationship to climate, a relationship in the South to the hot period of the year. We have a school year that has developed historically and traditionally so that education, in reality, is a part-time profession. We do not employ teachers on a full-time basis. Teachers' salaries are calculated on a partial year basis and we have all of the difficulties that are involved in trying to achieve a full competitive salary for a part-time occupation. We have, down through the years, operated on the basis that men who come into the profession as teachers in most instances must go out and see if they can find some other kind of occupation for a few months during the year in order to earn anything like a competitive salary.

I'm proposing that the time has come to eliminate education as a part-time business. It doesn't mean that everybody works for a full 12 months. We'll have many teachers who prefer to work for a shorter period of time. If so, the structure should permit it, but it should also be a structure that would offer a full-time occupation for those people in the educational profession who want a full-time occupation.

We are involved in a metropolitan area-wide study to divide our school year into four quarters, not a mandatory four quarter program, but one that would be permissive. It would provide not the same cut-and-dried relatively inadequate educational program during the summer quarter, for example, but a program that offers educational opportunity for all pupils who wish to take advantage of it.

In the beginning, we think it will be very similar to our present three-quarter school year—the regular school year and summer school. But, if it is divided into four equal quarters and they all operate on the same basis, eventually we are going to devise a structure that will permit students a maximum choice. Increasingly, students will be going to school four quarters, or choosing a different three quarters if we make each quarter stand

on its own feet. We've already learned that this development will mean that there will be a maximum curriculum change as a result of the studies that are involved in making this transition.

We are also moving in the direction of establishing a high school that will operate on a 10-period day rather than our present 6-period day. The colleges have done this for a long time, and, in my judgment, the time has come to expand the flexibility that is involved in the educational process. This, again, means for most pupils a matter of choice. It doesn't mean the pupils would come and stay 10 periods. It means that there would be pupils coming and going at different times during the day. We've experimented with a program where a class in electrical science meets for five hours on Saturday. On the basis of our experiment, we have found there has been a greater academic achievement as the result of this program than if the course had been taken in the one-hour per day with a traditional plan.

We are always concerned that in physical education classes, the students dress-out, go out, take a bath when they come back, have occupied one-half or more of the period, and have about 30 minutes left. With the maximum increase that is coming about in laboratory science, about the time you get your laboratory experiments under way, the bell rings and you have to put the darn stuff up and you've wasted your time. Why can't we be smart enough to move in the direction of changed patterns and turn to the flexible schedules that will do the job? We think a 10-period day has real merit.

Why do we have to say to pupils who work part time, "The only time you can work is in the afternoon; you've got to come to school in the morning and you work in the afternoon." We could double the number of pupils who would get the valuable benefit of a job-related education by changing our structure. Now you say, "Well what does all this have to do with our major purpose?" It has everything to do with the school park that we are talking about, and it has everything to do with the development of an educational program that will meet the needs of an organized society. All I can say is that we have no alternative but to move objectively and realistically toward adapting and making these changes that are necessary to make our school program more effective. I don't know how many students would come to school within a summer quarter. Incidentally, it has a relationship to air-conditioned buildings, to the size of facilities, and to

the design of the facilities. Atlanta has not built a school since 1961 that is not air-conditioned throughout and it is not our plan to do so, believing that this is a part of the preliminary planning that must be given consideration as we move in the direction of the desired plan.

I'm going to talk a little bit about Atlanta. I'm sure that is what I was expected to do. Many of you know the city of Atlanta. Our former mayor, Mayor Hartfield, refers to Sherman's March through Georgia and to Atlanta as Atlanta's first urban renewal project. We have had some other urban renewal projects that have taken place, officially, legally, and otherwise. But Atlanta is a growing developing, bustling city with all of the problems that any other urban city would bring to its schools. We have the flights to the suburb. We have an increasing concentration of Negro population in the heart of the city. Not only because of the racial concentration, but also because of the other developments that are a part of the scene, we have a heavy concentration of the deprived in the heart of the city.

We have attempted a number of experiments for many years on the assumption that a great majority of these culturally deprived children could not learn effectively. We've undertaken some projects in recent years that demonstrate that we were completely in error. We have one project, for example, where a few years ago in one all-Negro elementary school with approximately 180 first graders, approximately half of the number were not performing at the second grade level at the end of the year. This past year in the same school with the same general population throughout the community there were fewer than four first graders out of 180 who were not actually performing on a second grade level at the end of the class year. You say, well gosh, what have you been doing? Why hasn't this been true all the time? If you do, you talk just like our Board of Education, because those are the questions that they and the community are asking. I've tried to analyze what it is that caused the difference. This is a part of the Hawthorne effect to some degree, but basically I think the major difference was that the staff made up its mind that it was going to accomplish this goal.

I read where a researcher went in to the teacher of a given school and at random picked out about 15 pupils, all of whom were far down the line in terms of potentials. He said to those teachers, "Now you can expect something dramatic to happen

during the course of this school year in terms of the accomplishment of these 15 pupils." The result at the end of the year pointed out that those 15, who by every measure were not expected to do so, truly were accomplishing in a dramatic and remarkable way. There is a matter of expectation to some degree, there's a matter of purpose, there's a matter of getting our educational staff oriented to this business of educating children, and it's no easy assignment.

Again, I say that I don't know of any group that has a more direct relationship to this problem than those of you who are concerned with the design and construction of school plants. Some of these changes will be more easily made if the school designers help lead the way to what is potentially possible. I don't believe there is any particular magic in school teaching; no particular magic in self-contained classrooms. But there is magic in a concerted determination on the part of all concerned with this educational process to accomplish the results that are potentially possible. I brought some slides along to try to give you some insight into one particular project that we have in the planning stages in Atlanta. I'm sure the screen is not going to be large enough for everyone to see as I had hoped, but I think it will give you an opportunity to run through them rapidly and get some understanding of this particular project and some of the other points that are related directly to the construction of school plants in the city of Atlanta. As I show these keep in mind that I am talking about a city that on the one hand has as many gleaming bright new downtown facilities as any other city in the nation. It also has as many of the problems as any other city in the nation, and we have no final answers. But we are convinced that we will come a lot nearer finding the solution to these problems if we work at it.

This nice Washington neighborhood center is a section of the city of Atlanta. It is one of the ghetto sections of the city. For all practical purposes, it is all Negro. It is representative of some of the unemployed hard-core individuals who for more than one generation have been involved in a ghetto slum area. It is an area that is projected for another urban renewal project. It should have been included in an urban renewal project some time ago, but it's just now reaching the point of activation as far as the city is concerned. This shows the kind of houses that will probably be destroyed at this time. There has been a new direc-

tive that if we are to meet the needs of the people who live in sections of this kind, it's going to require an effort from several different directions.

This is an architectural rendering of a schematic plan, for we have proceeded only as far as a schematic design as of the moment. It will involve clearing out some slum houses in order to get space that is necessary for this building. We've had some difficulty in accomplishing this, but are proceeding on the basis of planning that involves cooperative financing for a facility that will cost approximately five million dollars. We have a bond issue, for example, and we are planning to build a middle school that would cost approximately two million dollars. This was included in the bond issue. We requested some additional resources from a local foundation and received the promise of half a million dollars to add to it. We applied through HUD for an additional two million dollars and have received authorization for a million three hundred thousand dollars to add to it. This is an effort to design and to build a total community school, a facility that will render total service to a community that is desperately in need of this service. When I say middle school, I'm sure you realize that this will include grades six, seven, and eight as we are thinking about it at present. One of the reasons the location was selected was because of its proximity to the neighborhood health center.

This is a little closer view of the same shot showing a swimming pool on the left and an amphitheater on the right. You will not be able to see some of the schematic designs very clearly; but to give you an idea, most of the school in terms of the traditional aspect to the program will be located on the third floor. Joint facilities, physical education facilities for example, will be designed for community and school use and will be on the second floor. Some of the shots that follow will indicate a further development of the schematic design. I'll show you in just a moment the list of the organizations and the activities that are a part of this program.

This is a sketch of the second floor plan that includes a large number of cooperative facilities, and then the third floor plan that is primarily "school" as we normally think about it, although the first and second floor will also include facilities that would be involved in the school program. Each one of those floors would have an outside entrance from the ground level. For example,

pupils going to the third floor to the school would not have to go up steps. They would come in an entrance that would be on this floor level.

This is the program that is tentatively planned in that facility. We are making plans for adult basic education, specialized occupational training, senior citizens facilities, gymnasiums, arts and crafts facilities, a large swimming pool, an amphitheater, social services including vocational counseling, relocation counseling, legal aid, welfare, surplus food distribution, child nursery services, and a day-care center. These are more or less traditional listings of those activities that are conceived as a part of the school program, not being as descriptive, we hope, in terms of the simple listing of the kind of instructional program that will be a part of it. In 11 of our high schools we are carrying on what is commonly referred to as a community school program. An assistant principal comes on the job in the middle of the day and is in charge of and coordinates an afternoon and evening program for adults and high school pupils. These are all located in high schools, but the program is specifically designed for the benefit of the community. It's a part of that 10-period day; it's a part of the school that begins operating at 7:30 in the morning and goes until 10:00 at night. It offers maximum flexibility for both pupils and adults to meet their needs.

We have the day-care center. Headstart has been a part of our program for the last three years. We intend, of course, to continue and make it an integral part of the plan for free education in keeping with what Dr. Carmichael was talking about today. We have lunch programs, of course, for Headstart and they are a part of the activities in this particular school with an increased emphasis upon the participation of the community as a part of the program. Community activities that bring parents and friends into the school for various kinds of activities are envisioned as part of the activity and the facility that will be a part of this community school. We are trying to think in terms of a community facility that will meet the needs of adults as well as youth.

This slide shows a late afternoon intramural program which is a part of our community school program—not a part of our regular school physical education program. The swimming pool will be operated jointly by the Atlanta park and recreation program and the school system. I'm sure that you are turning over in

your mind the nightmare that the community school director and everybody else is going to have in terms of coordinating all of the cooperating agencies that are a part of such a facility. I can envision a nightmare, too. In our preliminary planning, however, we are doing quite well. It is one of those things that we will play by ear and work out the problems as they develop.

This picture is a community school auditorium that will be jointly used in this facility. Arts and crafts for both adults and young people are a part of the program. In counseling, this shows a group of adults who are interested in a work-training program. The counseling program will also be a part of the facility in this field. This chart shows the cooperating agencies that are a part of this design. Think about it for a moment; and keep in mind that each one of those items listed calls for a kind of cooperation, calls for someone taking the initiative, to get the representatives of these various groups to sit down together and begin to think realistically about how each could contribute to an over-all plan that would benefit a specific community. The agencies are: the parks department, the housing authority, economic opportunity authority, family and children welfare services, community planning council, the planning department of the city of Atlanta, senior citizens services, vocational rehabilitation division, the State Department of Education, and the Atlanta Board of Education. By the time we get to the final plans stage we think there will be other agencies that will be a part of this undertaking.

When this facility is constructed, it will be under the overall direction of the Atlanta Board of Education. There will be appointed a community school director who will have the enormous responsibility of continuing the coordination between each of the services that will have offices, facilities, and programs operating in this facility. The employment service is one that is already being considered. As I indicated earlier, the sources of funds are the Atlanta Board of Education, the federal government through the HUD, and a private foundation. We are anticipating that the total cost will be in the neighborhood of five million dollars.

The next series of slides was picked at random from a group that was available in Atlanta. We've taken one school as a means of trying to show some of the design features in the schools we are building. This is an exterior view of the G. W. Hill School. You will notice that it is a precast concrete build-

ing. There is a minimum installation of windows, and it is air-conditioned. This is a large classroom, and you will notice that, in general, the division between classrooms and the dividing of the building into classrooms is accomplished by movable furniture. This same design feature is a part of most of our elementary schools and, on the basis of experience for the past several years, we think it is a tremendously valuable one. Here is another interior view of a classroom in use. This also is an all-Negro school. Incidentally, the Negro school population in Atlanta at present is approximately 57 per cent. The over-all Negro population in the city is about 45 per cent. The Negro population for the whole metropolitan area of Atlanta is almost exactly the same percentage as it was 20 years ago. The difference, as I pointed out earlier, is in the fact that the Negro population is moving into the heart of the city.

One of the real problems related to this whole question of school parks could be illustrated in Atlanta by saying that we have been pushed to the wall for the past 10 years in trying to build enough classrooms and other school facilities to take care of the expanding enrollment. The enrollment increases from about 2,500 to 3,000 pupils each year, and in two or three years during the past 10 years it has increased 4,000. So we have not had the building resources that would permit us to abandon relatively good classrooms. The only way we have been able to abandon them is for somebody to burn them down, then we build a new school.

The school shown here was constructed as a result of the old school's being taken by the construction of a new city auditorium. It created quite a rhubarb at the time but now everybody is quite happy about our new school. This is a picture of the library. It is air-conditioned, and you will notice it is carpeted almost throughout. We are using carpeting primarily because of its economy. If you pay the cost of waxing tile floors for a relatively small number of times you have bought your carpeting, and we get as an additional benefit all the other acoustical values. This is the library that is truly a resource center. It is much more than just a place for accumulating and storing books. Increasingly, we are building individual study carrels that have a significance in terms of our efforts to move in the direction of individualization of study. This is a part of the same concept of community facilities that are used by both children and the com-

munity. In this school, for the first time, we have a facility that is specifically designed for use by the community—by adults—during the school day. This is a part of our community school program.

Here is another overall view of a new school that will be opened this year, the Park School. In general, we are constructing a number of schools with very few windows but you do not get the impression of being closed in because within this building there are several interior courts.

This is the Williams School, a two-story building that does not appear to be. This elementary school has almost no interior partitions. It is divided by the movable furniture I mentioned a moment ago. Window walls with a lot of glass overlook these inside courts and are a very excellently designed feature. This is the Warren T. Jackson School. Each one of those pods contains space equivalent to about four regular classrooms. They can be separated by movable partitions, but operate most of the time with the moving partitions and folding doors open. Here is another recently completed school, and another one that's under construction to be occupied sometime during this school year. This is a middle school. Basically, Atlanta has not moved in the direction of middle schools, but this is one we are attempting. We are moving in this direction where it is possible to work it in properly with the need for additional facilities. This is an aeronautic wing for the technical school. I'm sorry I neglected to bring you a slide of the overall school. The rest of the school is in one major building. The aeronautics building is separated from the main one. The whole facility occupies a space, under roof, approximately equivalent to seven football fields.

This is a picture of the gymnasium that was added to one of our old schools. Here is another school that is under construction. It will be one of our larger high schools—housing 2,500 to 3,000 high school pupils.

What I am saying is that I know of no group that has a more direct relationship to the accomplishments of quality through educational programs than those of you who have a part in the design and planning of a new facility. This, as usual, is not going to solve our problems. It's going to take a new design for education. It's going to take a continuing, concerted, dedicated effort to try to find better ways of educating the boys and girls that are a part of our responsibility. A lot of the things that you and I

learned in the process of growing to maturity are now not being learned by young people of our urban areas. Somehow or other we must design facilities and programs that will substitute for the things that many of us learned by osmosis. Some of you learned some real things with great value down at that corner vacant lot. When you met your friends down there for the sand-lot baseball team you learned some things that kids don't learn today in the Little League in the highly organized plan. You learned some things in the process of working about your house, particularly if you were fortunate enough to grow up in an agricultural community. You learned many, many things in that process that today youngsters must literally be taught if they are to be learned at all.

I will close as I started. There has never been a time in history when there was a greater challenge to public education than today. There has never been a time in our history when there was a greater opportunity to do the educational job that is before us. It will not be easy. It will call for the best that anyone can bring to bear to help solve the problems that we face. All of us who are a part of education have an increasingly urgent responsibility to help find the answers. We have no alternative; we must. I view the future with confidence and complete assurance that we are big enough, smart enough, and able enough in public education to find answers to the staggering problems we face. Thank you.

Mr. Bailey: Thank you, Dr. Letson, for bringing us this most inspiring talk on what is being done in one of our great cities toward building for quality education. Again, I want to thank the U. S. Office of Education for making the conference possible. The Interstate School Building Service and George Peabody College for Teachers were asked to join in and help promote it. We thank each of you for having come, and hope that you have gotten something out of it that you can take back with you. Unless there are some announcements, I declare the conference adjourned.

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